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CONTENTS: Vol. LV. No. 3

	PAGE		PAGE
Bankruptcies and Failures	99	Medical Gleanings	101
British Pharmaceutical Conference	81	Miscellaneous Inquiries	104
Business Changes	91	New Companies and Company News	90
Colonial and Foreign News	80	Optical Society	89
Correspondence	102	Personalities	83
Day Before the Major	97	Pharmaceutical Society of Great Britain	84
Deaths	100	First Examination	84
Dispensing Notes	104	Jacob Bell Scholarships	84
Drug Statistics	106	Examinations in Edinburgh	85
Editorial Comments:—		Pharmaceutical Society of Ireland	82
Assistants Wanted	92	Council Meeting	79
Bottling Benzine	93	Scotch News	86
Tincture-drawback	94	Society of Chemical Industry	79
Newcastle and Coal	94	South African News	97
Japanese Iodine	95	Superfluous Hairs	91
Notes	96	Trade Notes	106
English News	76	Trade Report	103
French News	79	Treatment of Sprains in Horses	81
Gazette	99	Westminster Wisdom	100
Information Wanted	105	Wills of Deceased Chemists	89
Irish News	78	Women's Congress	
Legal Queries	104		
Legal Reports	98		

A CARD FOR ADVERTISERS.

OUR Publisher has handed us a card, on the front page of which is the brief inscription, "You have time to do it!" "To do what?" Turning over the leaf, we find the following pithy paragraphs addressed to advertisers:—

To get an inset ready for the Summer Number of THE CHEMIST AND DRUGGIST. It will be published on July 29, and will be circulated to twelve thousand of the best buyers of druggists' goods, chemicals, perfumery, photographic goods, soaps, &c., in the world. The opportunity is one which no firm or man of enterprise should miss, because it is the last opportunity there will be in 1899 to have insets in THE CHEMIST AND DRUGGIST.

Will it pay to do it? Certainly; it has done so hitherto, and firms who have placed insets in former editions of *luxe* of the C. & D. (as the Summer Issue will be), have come back again—they give repeat orders; there can be no better proof than this that it pays. See who these firms are by referring to the list of names [printed on the flyleaf, thirty-six repeats, thirteen new insets]. They embrace some of the most expert and far-seeing advertising houses as well as some of the oldest-established firms in the British Empire. They have found it pay. So will you.

The Publisher wishes us to add that if any advertisers have decided to have an inset in the Summer Issue, and have not informed him of the fact, he will be glad to hear of it by an early post. For our own part, we may add that the British Pharmaceutical Conference will be held in Plymouth in the Summer Number week, and will be reported in that issue. The number will contain much other interesting matter besides, and will be an exceptionally good one for advertising in.

Summary.

A FERDINAND HURTER memorial lecture is proposed (p. 76).

THE IODINE SYNDICATE'S operations in Japan are exposed by a correspondent (p. 95).

THE DEATH OF MR. SWIFT, a prominent Melbourne pharmacist, is reported (p. 100).

SIR CHARLES CAMERON'S analytical appointments in Ireland are growing apace (p. 78).

IMPORTANT PARTICULARS about Formosan camphor are given in our Trade Report (p. 106).

THE BRITISH IONONE PATENT is disputed, a Hamburg firm wanting it to be revoked (p. 98).

NEW TINCTURE-DRAWBACK REGULATIONS have been agreed to by the Excise authorities (p. 94).

PROFESSOR CHANDLER, of New York, is the new President of the Society of Chemical Industry (p. 86).

THE OPTICAL SOCIETY has at last got a committee. The names of the members will be found on p. 89.

THE MINOR EXAMINATION is heavy this month, and the failures are more numerous than usual (p. 85).

A PHARMACEUTICAL WOMAN, who attended the Women's Congress, favours us with her impressions (p. 89).

THE PRELIMINARY EXAMINATION QUESTIONS given to young chemists in Great Britain this week are printed on p. 84.

MR. BEILBY, in his Presidential address to the Society of Chemical Industry at Newcastle, dealt with the economy of coal (p. 86).

THE GOVERNMENT has appointed a departmental committee to inquire into the use of colourings and preservatives in food (p. 81).

MR. JAMES REID does not approve of the Edinburgh programme, under which pharmacy companies would be recognised (p. 102).

THE PHARMACEUTICAL CONFERENCE is likely to have too much to do at Plymouth. More than two dozen papers are already promised (p. 81).

CORRESPONDENTS support Mr. Glyn-Jones in his fight with the Pharmaceutical Council regarding unqualified dispensers in doctors' surgeries (p. 103).

THE IRISH PHARMACEUTICAL COUNCIL rightly maintain that their licence is a better guarantee of fitness to examine drugs than the F.I.C. certificate (p. 82).

SANTONIN is dearer, citric and tartaric acid firmer, quinine quiet, ipecacuanha as it was, so are mercurials, and the markets generally are deadly dull (p. 107).

CHEMISTS OF RHODESIA, as well as doctors, are up in arms against the Government's way of regulating pharmacy, dentistry, and medicine in the young colony (p. 80).

IN SCOTLAND it has been held that the use of trade-marked aerated-water bottles by those to whom they do not belong is not a criminal offence; in Ireland it is (p. 98).

MR. E. M. HOLMES supplements Captain Guy Burrows' remarks in regard to Pigmy arrow-poison (p. 103). He has also suggested a new method of importing strophanthus (p. 107).

BENZINE may be sold in pennyworths and bottled on unlicensed premises, so far as the London County Council is concerned. The new regulations sanctioning this are printed on p. 93.

It appears, from a reply by the Chancellor of the Exchequer, that the sale of medicine stamps in Scotland is less than 1 per cent. of the total, although the licences to sell are 1 in 13 (p. 81).

THE DIFFICULTY OF GETTING QUALIFIED ASSISTANTS is becoming acute, and we show in an article on p. 92 that this has been growing for some years, and that it is due in part to the low percentage of passes in the Minor examination.

English News

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Hurter Memorial Lecture.

The Liverpool Section of the Society of Chemical Industry proposes, with the approval of the Council, to perpetuate the memory of the late Dr. Ferdinand Hurter, especially his great services to applied chemistry, by instituting a memorial lecture to be given every second year on some subject connected with applied chemistry. The lecturer will be chosen by the Liverpool Section of the Society, and it is proposed to collect a sum of 300*l.*, which is reckoned to be sufficient for the endowment. Amongst the subscriptions already promised are the following:—Sir John Brunner, Bart., 25*l.*; Mr. Holbrook Gaskell, 25*l.*; Sir David Gamble, Bart., 21*l.*; Mr. George Beilby, 10*l.* 10*s.*; Mr. Alfred Smetham, 10*l.* 10*s.*; Mr. H. Wade Deacon, 10*l.*; Mr. Frank Gaskell, 10*l.*; Mr. Holbrook Gaskell, jun., 10*l.*; Mr. Samuel Hall, 10*l.*; Dr. Ludwig Mond, 10*l.*; Mr. E. K. Manspratt, 10*l.*; Sir Charles Tennant, 10*l.*; Messrs. Marion & Co. 5*l.* 5*s.*; Mr. John Brock, 5*l.*; Professor J. Campbell Brown, 5*l.*; Mr. Eastace Carey, 5*l.*; Colonel J. B. Gaskell, 5*l.*; Mr. W. Gamble, 5*l.*; Mr. J. C. Stevenson, 5*l.*; and Mr. T. W. Stuart, 5*l.*

Preservatives not Satisfactory.

¶ The Gloucestershire County Analyst (Mr. E. Embry), at the direction of the Council, has examined forty-three samples of perishable foods, with the object of ascertaining to what extent preservatives are used to keep them. In his report Mr. Embry states that the best method for preserving milk and cream is to observe the greatest cleanliness in every stage of handling. As to chemical preservatives, salicylic acid is undoubtedly bad if used in sufficient quantity to keep food sweet, and boric acid should only be used in small quantities, and even then it is of very little value. Formalin is very efficient even in small quantities, but very little is known about its effect on digestion.

Drugs in the West Riding.

Mr. Alfred H. Allen, of Sheffield, public analyst for the West Riding of Yorkshire, in his report just issued, states that the 686 samples examined by him during the quarter ending March 31 included 37 samples of "camphorated oil," of which only 17 were of reasonably good quality. No fewer than 20 of the samples were deficient in camphor to the extent of 17.5 per cent. In four cases mineral oil was substituted for olive oil. In a fifth case a mixture of mineral and cottonseed oils was thus substituted. In a sixth case 15 per cent. of olive oil was replaced by mineral oil, and in another case sesame oil replaced olive oil. One preparation was found to consist of 5 per cent. of camphor and 95 per cent. of mineral oil, the bottle being labelled "Camphorated oil, Beehive Brand. Prepared with finest olive oil and pure camphor." "In my opinion," says Mr. Allen, "the numerous variations from the standard quality are intentional, or due to gross carelessness in the preparation of the article. There is no foundation for the statement sometimes urged in mitigation of the offence that the preparation is liable to deteriorate on keeping owing to the volatility of the contained camphor."

Of 16 samples purchased as milk of sulphur only 3 were genuine the remaining 13 containing proportions ranging from 57 to 79 per cent. of hydrated calcium sulphate. The British Pharmacopœia, 1898, requires "milk of sulphur" to consist substantially of pure sulphur.

Of 30 samples of sweet spirit of nitre 17 were substantially of B.P. quality. Five others were not quite up to standard, but exhibited no marked departure therefrom. One sample contained only about one-half the minimum proportion of nitrous ether required, and 7 others contained still smaller proportions, besides excess of water beyond the legitimate quantity.

Six samples of Gregory's powder had been received, of which 3 were found to be genuine. In the case of the

others calcined magnesias had been replaced by magnesium carbonate.

Of 5 samples of spirit of sal volatile 2 were genuine, a third was somewhat defective, while 2 showed a considerable departure from B.P. requirements. Thus, one of the samples contained only two-thirds of the amount of active ingredients (ammonia and ammonium carbonate). It was pleaded for the defence that the sal volatile had lost its strength by repeated openings of the bottle containing it, and that this was indicated by the lower sp. gr. (0.8859) which had been reported in the certificate, as compared with the sp. gr. (0.883 to 0.893) required by the British Pharmacopœia. As a fact, however, any accidental or unavoidable loss of either alcohol or ammonia caused by opening the bottle would tend to increase the gravity instead of diminishing it, so that the explanation put forward by the defence could have had no foundation. The summons was, however, dismissed by the Magistrates.

In concluding his report Mr. Allen remarks upon the necessity of standard preparations, such as those recognised in the British Pharmacopœia, always being sold as nearly as possible of uniform strength. "This is fully recognised by registered pharmacists, but unqualified shopkeepers naturally have not the knowledge of the character of drugs which is desirable, nor do they in many instances appear to realise the responsibility attached to their sale."

The Daisy Prize-winner.

In the recent competition organised by Daisy (Limited), Leeds, for the best-dressed chemist's window, open to chemists and druggists throughout the United Kingdom, the first prize (5*l.*) was awarded to Mr. H. S. Arnold, chemist and druggist, Cwmavon, Port Talbot. According to the report of the adjudicators, the points securing the premier position were "effect," "originality," and "artistic taste."

Yearned for Peppermints.

Two little boys, Edward Ives and Frederick Jones (8), were charged last week at the West London Police Court with being concerned in stealing thirty-four packets of peppermint-lozenges belonging to Arthur William Hall, chemist, 509 Fulham Road. The juvenile offenders were consigned to the workhouse.

Taken in.

At Southampton Quarter Sessions last week, a mariner, named Wm. Chapman, was indicted for obtaining by false pretences the sum of 5*s.* from Messrs. Randall & Sons, chemists, Southampton. Three other similar charges were preferred against the accused, whose *modus operandi* was described in the *C. & D.* of July 1, page 3. Prisoner pleaded guilty, and got six months' hard labour.

At Wakefield, on July 5, John Lytton and Thomas Hayes were charged with having obtained 2*s.* 6*d.* from Mr. William Pollard, chemist, Wakefield, by pretending that they were collecting for distressed miners, which is stated to be false. Evidence having been given, the case was remanded.

A Fatal Fermenting Haystack.

A bricklayer at Stapleford, near Nottingham, found a man named Walters lying unconscious under a haystack on July 7, and, obtaining assistance, had him removed to the Nottingham General Hospital, where he died. A *post-mortem* examination showed that death was due to suffocation by carbonic-acid gas, which the doctor stated had been given off by the newly-made haystack.

They Object to it.

A meeting of the medical profession of Birmingham was held last week at the Medical Institute, with Mr. Priestley Smith in the chair, when resolutions were passed in regard to the proposed consulting institution, which is to provide medical and surgical consultations to its subscribers. The resolutions were directed to show medical men that the institution would be contrary to medical etiquette, and that any practitioners who took service with it would do so at the peril of being removed from the register in the event of the institution advertising for patients.

Sunlight at Paris.

The directors of Lever Brothers, soap-manufacturers, Port Sunlight, Birkenhead, have decided to take, during May or June of next year, all the employés, male and female, over twenty years of age, together with the men's wives, to visit the Paris Exhibition. About 2,000 will participate in the trip, which will extend over three days.

The "Madame Frain" Case.

Three further hearings of this case have been taken at Worship Street Police Court on July 6, 7, and 12. The evidence for the prosecution up to this point has been called with a view to showing that the medicines sold by the five prisoners who traded as "Madame Frain" were purchased with the intention of procuring abortion. Several women, married and single (whose names and addresses have been in every case suppressed), gave evidence, and the prisoners stand remanded, bail being allowed.

Drug-contracts.

The following workhouse contracts have been arranged:—

Malmesbury.—Mr. H. M. Ratcliffe, for carbolic soap, at 16s per cwt.

Stratford-on-Avon.—Mr. R. Hawkes, pharmaceutical chemist, for drugs and sundries.

Not Guilty.

The man John Aureus Burt, described as a chemist and dentist (but whose name does not appear on the register of chemists and druggists), appeared at Newcastle Assizes, on July 9, to answer the charges of having used an instrument or other means to procure miscarriage, and also with administering a certain noxious drug to the same end. The case has been referred to in previous issues of the *C. & D.* Evidence for the prosecution having been given by a domestic servant named Davidson, and a plumber named Reed, the prisoner, who stated that he was an assistant to Mr. Hornby at Wellington Quay, gave evidence on his own behalf, in the course of which he admitted examining the girl and prescribing for her, but denied using instruments or giving ecobolics. The jury brought in a verdict of not guilty, and the prisoner was discharged.

The False Declaration Case.

At Thames Police Court, on July 10, Augustus Tregoning, photographer, was committed for trial on a charge of making a false declaration with regard to the loss of a pawnticket. Prisoner declared at that court that he had lost a ticket relating to an albert chain, when, as a matter of fact, prisoner had given it to Mr. C. G. Targett, chemist, East India Dock Road, as security for some photographic materials which he had purchased from Mr. Targett.

A Doctor's Mistake.

At an inquest held at Manchester on July 7, on the body of a Dr. Richards, evidence was given that deceased came in after seeing some patients and complained of feeling very tired. He then went into his surgery, and shortly afterwards his wife found him unconscious in his chair, with a medicine-glass in front of him. Doctors were sent for, but deceased died in twenty minutes. The glass had contained a mixture of prussic acid, bismuth, and a vegetable bitter. The *post-mortem* examination showed that death was due to cardiac failure from an overdose of prussic acid, and it is conjectured that in mixing the draught deceased had put in an overdose of the acid by mistake.

Took the Lot.

An infant prodigy at Ashford (Kent), aged 21 months, got hold of a box (intact) of Dr. Williams's pink pills and swallowed the lot. The worst was looked for, and medical aid was promptly summoned, but it is recorded that the effect produced has been more beneficial than otherwise.

Thought it was a Bit of Fun.

At Bristol, on July 5, a libel action, Basker v. Hadwin, was heard. The alleged libel was contained in a letter purporting to have been written by the plaintiff himself, but which was actually written by a third party at the instigation

of the defendant. Plaintiff was Mr. John Anthony Basker, pharmaceutical chemist and mineral-water manufacturer, Bridgwater. Mr. Basker lived at Bridgwater for some years, and was conductor of the Choral Society there. He removed to Weston-super-Mare in 1896, and became choir-master of St. Paul's Church. Differences arose between plaintiff and defendant, who were both members of the Church Council, with the result that plaintiff resigned his conductorship of the choir. Shortly afterwards a letter purporting to be written by plaintiff was sent to several persons. This letter, to which Mr. Basker's name was attached, apologised for not being able to ruin the choir of St. Paul's Church, as he had previously ruined two choirs at Bridgwater. Evidence was given by a Mrs. Offer, a friend of defendant's wife, that she had written five copies of the letter, at the request of the defendant, "thinking it was a bit of fun." Further evidence was given, but parties agreed, defendant consenting to sign an apology and to have judgment entered against him for 20s. and costs.

The Pills or the Heat?

An inquest was held at Astley Bridge on July 7 into the circumstances of the death of a man named Carlon, who purchased a penny box of pills at a general shop to relieve a headache, and was found next morning in a dying condition. Death ensued before medical aid could be procured, and the Coroner (Mr. R. Taylor) said that deceased must have collapsed from the effect of the pills or the heat. A verdict of death from natural causes was returned.

Fire at a Wholesale Druggists'.

An outbreak of fire was discovered on July 10 on the premises of Messrs. Joseph Gillman & Sons, wholesale druggists, Birmingham. Barrels of oil and a number of packing-cases were destroyed, but the fire-brigade succeeded in extinguishing the flames before any damage was done to the building.

Cricket.

DRUG-TRADE CHAMPIONSHIP—Burgoyne's C.C. played City Mill's C.C. (Howards & Sons) at West Ham Park on July 8. Burgoyne's, 107; City Mill's, 67. Humble (Burgoyne's) carried his bat through the innings for a well-played 36 (not out), and Walker was top scorer for Howards.

Willows & Co. C.C. v. Johnsen & Jørgensen.—Played at Elm Farm on July 8. Scores: Willows C.C., 116 for 5; Johnsen & Jørgensen, 73 for 5. E. E. Miller scored 58 not out for Willows.

Allenburys C.C. v. Bolland's C.C.—Played at West Green on July 8. Allenburys won, making 101 to Bolland's 50. The top scorers were Goldman (29 not out), F. C. Hanbury (17), and Coles (11) for the winning side, and Thackrow (19) and Coxon (11 not out) for the losers. Bolland's were playing one man short.

Davy Hill's C.C. v. Kepler C.C.—At Bowes Park, on July 8 (League match). Scores: D.H.C.C., 71; Kepler, 52.

The championship record stands as follows, up to and including July 8:—

Name of Club	Matches Played	Won	Lost	Drawn	Points
Burgoyne's ...	7	6	1	0	12
Kepler ...	6	5	1	0	10
Davy Hill's ...	5	3	2	0	6
Stevenson & Howell's ...	3	0	3	0	0
City Mills ...	3	0	3	0	0
Hewlett's ...	4	0	4	0	0

Summer Trips.

The employés of Messrs. Besley & Dalgleish (Limited), chemists' printers, Exeter, journeyed to Birmingham on July 8 for their annual outing.

The employés of Messrs. Stevenson & Howell (Limited) went for their annual excursion on Saturday, July 8, by special train to Folkestone. On arrival the trippers amused themselves in various ways until the dinner-hour, when an excellent repast was admirably served at the Rose Hotel. Toasts were given, and the party dispersed to make the most of the fine afternoon, many going for a drive to Saltwood Castle. Tea was taken, and the party left Folkestone at 8.30, and arrived in London shortly before midnight.

The Exeter employes of Messrs. James Townsend & Son, chemists' printers, Exeter and London, went to Bournemouth on July 8 for the day. Dinner was served at the Hôtel Mont Dore, the chair being occupied by Mr. James Townsend and the vice-chairs by Mr. W. Townsend and Mr. T. J. Tayler. The loyal and patriotic toasts having been duly honoured, Mr. Tayler submitted "Our Worthy Employers and Family, and Prosperity to the Firm," which was suitably acknowledged by Mr. James and Mr. W. Townsend. Other toasts followed, and the party dispersed to visit the many places of interest in and around Bournemouth. Many took steamer-trips to Totland and Swanage, whilst others preferred Barnum and Bailey's Show or the concert at the Winter Gardens. The London staff visited Brighton on the same day, and greetings were exchanged by telegraph between the two parties.

Petroleum Sewers.

At the weekly meeting of the London County Council on Tuesday it was agreed, on the recommendation of the Public Control Committee, that a copy of the order made by the Council on December 20, 1898, prohibiting any petroleum or any product of, or residue from, petroleum or any liquid or substance giving off inflammable vapour being permitted to flow into any sewer, be served on the following chemical-works:—Messrs. T. Tyrer & Co., Cook's Road, Stratford, and Messrs. Howards & Sons, High Street, Stratford.

Bottles and All.

A coroner's inquest was held at Bath on July 11 on the body of a man named Watson, whose stomach, on a *post-mortem* examination being made, was found to contain twenty small bottles of mercury all securely stopped with guttapercha. They weighed over 1 lb., and had perforated the stomach, setting up peritonitis, which caused death. The jury found that the deceased swallowed the bottles while in a state of dementia, believing they were medicine.

Dr Maguth, LL.D.

At the South-Western Police Court on July 12, Stephen Shepperd Maguth, who says he is a LL.D. of Cambridge, was charged on remand with the manslaughter of Harry Arthur Baker, aged 7. Mr. Horace Avory, for the prosecution, recapitulated the evidence given at the Coroner's inquest and at a former hearing of the case, and reported in our last week's issue. The evidence of the mother of the child was repeated. The "drops" for the use of the deceased were described by prisoner as the "People's Spasmodic Drops." In cross-examination witness said she believed prisoner was a medical man, in spite of the fact that "Botanic Dispensary—advice gratis" appeared on his windows. He told her that all his medicines were made from the herbs of the field. Prisoner was again remanded.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Barytes in Ireland.

The Irish Industrial League is in communication with all the County Councils in Ireland with a view to having the barytes deposits in various localities thoroughly exploited.

Had the Board This Time.

The Local Government Board asked the Guardians of Monaghan why they gave the medicine-contract to a firm at 25 per cent. off list-price, while another firm quoted 40 per cent. To this the Guardians have replied that the firm which tendered at 40 per cent. had also tendered for the supply of surgical instruments, and, according to the Local Government Board's circular, that precluded the consideration of the drug-tender. Further, the gentleman who was preferred was the old contractor.

Long Glasses at Longford.

The following amusing conversation occurred at last week's meeting of the Longford Board of Guardians, in respect to the consumption of 480 oz. of whisky by the paupers in the week previous:—

Chairman: What is the cause of giving it in ounces? How many ounces in a glass?

Clerk (to Mr. J. McCann, assistant-clerk): How many ounces in a glass of whisky?

Assistant-clerk: There are two and a half in a half-glass.

Clerk: So that is five in a glass.

Assistant-clerk: There are 40 oz. in a pint.

Clerk: Now you can find out how much supplied.

Chairman: Why is it given down in ounces?

Clerk: We have to give it that way under the new rules in the new books.

Chairman: Down in your country, Mr. Kane, they would not know how to measure it by ounces. (Laughter.)

Mr. Kane: They would not; they would understand more about the glass.

Clerk: The ounce would not be a mouthful. (Laughter.)

The glasses and pints of Longford are, apparently, Home Rule measure, and not Imperial.

Drug-analysts.

Mr. J. A. Woodside, Ballymena, has been appointed analyst for drugs and medicines to the Ballymena Poor-law Union.

The Guardians of Kilmallock Union on July 8 considered four applications for the appointment of analyst of drugs and medicines to the Board, and Messrs. Thorp & Platt, Limerick, were appointed for six months.

Mr. H. Moore, Dublin, has offered to act as analyst to the Killarney Union for 10% a year, but the Guardians wish Sir Charles Cameron, the county analyst, to do the work for nothing, and have asked the County Council for advice in the matter.

The Tralee Guardians have appointed Sir Charles Cameron as analyst at 10% a year. He wants 2s. 6d. per sample for all above twenty-four, and the Board are unwilling to give that, as two pharmacists offered to do it for 10%. Sir Charles Cameron has offered to do the Tuam work in this line at 10% a year up to twenty samples, and after that for 5s. per sample. The Guardians think 7% enough, and have offered him that.

At a meeting last week of the Mullingar Board of Guardians the appointment of a drug-analyst led to rather a personal discussion. The final selection lay between Sir Charles Cameron and Mr. Warren, both of Dublin, each of whom offered his services at 10% a year. One side said Sir Charles was too old, and the other side held that Mr. Warren was too young for the post. Objection was also made to putting into Sir Charles's can "all the fat that was going." In the long run three voted for Sir Charles and twenty-five for Mr. Warren, who was accordingly elected.

Sir Chas. Cameron wrote to the Sligo Guardians stating that he would be glad to accept the position of drug-analyst to Sligo Union at a salary of 5%, and a fee of 2s. 6d. for every analysis of drugs only in excess of twenty-four. As regarded the analysis of water, tea, and other foods, liquors, soap and other articles supplied to the workhouse, no fee would be charged, and no limit fixed as to their number. The Board thought they could hardly expect anything cheaper and Sir Charles was unanimously appointed, at a salary of 5% a year. At a meeting of the Granard (co. Longford) Board of Guardians on July 7 the appointment of Sir Charles Cameron as Union analyst was considered. Mr. Moran proposed that Mr. Warren be appointed, as it would be fairer to give it to a young man fighting his way in the profession. The Clerk explained that there was no application from Mr. Warren, and Sir Charles was unanimously appointed for a year at a salary of 10%.

TO PROTECT LEMONS FROM MILDEW.—Instead of laying them down, a thread should be passed through them, the two ends fastened together, and the lemons hung up in such a way that they are left perfectly free, not being touched by anything. Lemons kept in this way never become mildewed.—*Sudd. Ap. Ztg.*

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

A Lady-dispenser.

Miss Rennie has been appointed dispenser at the Royal County and City of Perth Infirmary. Miss Rennie was trained at the General Hospital, Birmingham.

A Disorderly Assistant.

At St. Rollox Police Court, Glasgow, on July 1, Peter Glen, chemist's assistant, was fined 10s. 6d. or seven days' imprisonment for creating a disturbance in a doctor's shop.

Glasgow Parish Chemist's Salary.

The committee of the Glasgow Parish Council have resolved that the salary of Mr. Halley, the chemist to the Council, should be increased from 120*l.* to 140*l.* per annum.

Admirers of the Prince.

During the visit of the Prince of Wales to Edinburgh last week Mr. David McLaren, chemist, South Clerk Street, had his premises artistically draped and emblazoned with the Royal and Prince's arms. The Duchess of Buccleuch was observed to draw H.R.H.'s attention to the display. Some other chemists had regilded their mortars for the occasion.

Apprentices Enjoying Themselves.

On July 5, all the apprentices in the various pharmacies in Dunfermline had an outing together. The party drove to Aberdour in brakes, and from there proceeded by steamer to Leith. After spending an hour or two there and in Edinburgh, they returned to Aberdour, and reached Dunfermline at about 11 P.M. The weather being all that could be desired, the youthful party were highly delighted with their trip.

New Doctors.

Among those who are to receive the degree of Doctor of Science at the Edinburgh University Graduation Ceremony on July 29 is Mr. George Coull, B.Sc., chemist to Messrs. Raimes, Clark & Co., Edinburgh. Mr. Coull is one of the best known of the younger generation of Edinburgh pharmacists. He served his apprenticeship with Messrs. Baildon & Son, Princes Street, and while with them passed the Minor and Major examinations. Thereafter he entered the Edinburgh University, and after the three years' course graduated in Science. Mr. Coull was a very active worker in the Edinburgh Chemists', Assistants' and Apprentices' Association, of which he occupied the presidential chair. He has also been a voluminous contributor to the evening meetings of the North British Branch, and for some years occupied a seat on the executive. For more than a decade he has been director of Messrs. Raimes, Clark & Co.'s laboratories. We also observe that Mr. John Coates, M.B., C.M., son of Mr. Joseph Coates, the popular representative of Messrs. Raimes, Clark & Co., is to receive his M.D. degree on the same date.

French News.

(From our Paris Correspondent.)

A MIDNIGHT MEETING.—The Association of French Pharmacists' Assistants held a special meeting last Monday night in the Conference Hall of the Bourse du Travail, Paris. The chair was taken at 10.30 P.M. by M. Astier, the Pharmacien-Deputy, and there was a good attendance of pharmacists and assistants. M. Astier expressed his sympathy with the assistants in their endeavours to improve their position, and to secure shorter hours of work, and was followed by M. Jocelyn Robert, the energetic President of the Association, who expounded with his wonted enthusiasm its aims and objects. "Unqualified Assistants" was the subject of a paper by M. A. Bèques, and M. F. Guy, Doctor of Law, spoke

on the "Legal Position of Assistant Pharmacists and their Responsibility." The meeting broke up in the early hours of Tuesday morning.

THE ANTI-PATENT MEDICINE MOVEMENT.—Amongst the combinations formed more or less as the result of the failure of the negotiations last year between the General Association of French Pharmacists and the Syndicate of Patent-medicine Manufacturers is the "Syndicate of the Large Commercial Pharmacies of France" (which owes its existence to the initiative of M. A. Mille). This appears to be a combination of the leading "cutting" pharmacies throughout France, with the object of combating any attempt by patent-medicine manufacturers to protect prices. The by-laws of the Syndicate set forth that its object is to support and defend the commercial interests of its members. French citizenship and the pharmacien's diploma are the conditions of admission, coupled with an entrance-fee of 50*fr.* and an annual subscription of 24*fr.* There is a committee of nine members, including the president, secretary, treasurer, &c. This committee has full power of management, including the giving of legal and financial support to members or others who may have to defend lawsuits on professional grounds; also to issue publications, circulars, &c., which may be considered favourable to the interests of the Syndicate. The first business of the Syndicate is to oppose a combination made by a few patent-medicine manufacturers to sell their specialities with vouchers, as a means of securing a fair profit to retailers. "This is a rapid step," according to the Syndicate, "towards the sale of specialities at marked prices which cannot be hidden, because, if we are still allowed 20 per cent., when once the arrangement is in working order the specialists will reduce the discount and force us to sell at marked prices. We cannot caution pharmacists too much against the danger that will result, because hitherto competition in prices between pharmacists has been confined to patent medicines, but if that is stopped it will turn to drugs and medicines." It is for this and similar reasons that the Syndicate gives "a cry of alarm while there is yet time," and asks for the support of all serious pharmacists.

South African News.

(From our Correspondents.)

ROBBEN ISLAND CONTRACT.—Messrs. P. J. Petersen & Co., Cape Town, have been again appointed contractors for the supply of drugs, &c., for use on Robben Island.

NEW CAPE DOCTORS.—The following were registered last month as medical practitioners in Cape Colony:—Friedrich Henry Domisse, M.B., C.M. Edin., 1898, and John Henry Bain, M.B., C.M. Edin., 1898.

MOTHER SEIGEL IN S. AFRICA.—Owing to the hostile attitude of the Cape Government towards company trading, Messrs. A. J. White (Limited) have been compelled to make different arrangements as to the working of their South African branch. Messrs. Bartholomew and Dixon will in future look after the company's South African interests. Messrs. Hiley and Clarke, formerly joint managers, are now in England, and they purpose opening up business for themselves as manufacturers' representatives for South Africa, with headquarters at Cape Town. [They may be addressed c/o THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.]

NEW PHARMACY IN BULAWAYO.—Messrs. Smart & Copley have opened a high-class branch pharmacy in Main Street, Bulawayo. It is the first building in Bulawayo having cement-concrete foundations. Provision has been made for the probable addition of one or more storeys. The shop itself has a massive Indian teak front, the windows being of plate glass, and the upper panels of stained glass and lead glazing. The interior fittings were supplied by Messrs. S. Howlett & Son, Mile End, London, E. Special attention has been paid to the dispensing-department, which will be supervised by Mr. W. Dawn Copley, who is Secretary of the Rhodesian Pharmaceutical Society. A local chronicler, in writing about the new pharmacy, illustrates the completeness of the stock by stating that on a recent call from

Messrs. Burroughs, Wellcome & Co.'s traveller he was very much surprised to find he could not name a product in tabloids which the firm did not possess. Another feature of "The Rhodesia Pharmacy" is the stock of assay-materials, which enables the firm to completely equip an assay-office. The shop is lighted by electricity with seven 32-candle power lamps.

TROUBLE IN RHODESIA.—Some time ago we reported that a Pharmaceutical Society had been formed at Bulawayo, under the presidency of Mr. F. J. Byrne, and that steps had been taken to obtain a Pharmacy Act for the colony. The Society suggested that the provisions of the Cape Act should form the basis of the Rhodesian one, and the Government appear to have taken this far too literally, because early in June a draft Ordinance was introduced into the Rhodesian Parliament to regulate the practice of medicine, dentistry, and pharmacy. The draft proposed the appointment by the administrators of a Medical Board consisting of three to nine members, one of whom would be a chemist, another a licensed dentist, and the rest medical practitioners. The provisions of the Bill for registration were practically the same as those of the Cape: persons might obtain a licence to practise as chemists and druggists who were so registered in Cape Colony, or who had passed the Major and Minor examinations of the Pharmaceutical Society of Great Britain or the examination of the Irish Pharmaceutical Society, while provision was made for the exemption of those already in business in Rhodesia, and for admission to examination of all persons who had served an apprenticeship of four years to any duly qualified or licensed chemist and druggist in South Rhodesia or elsewhere. The Pharmaceutical Society object to various clauses in the Bill, especially one which states that

"No licence as a chemist and druggist shall be requisite—(1) for the sale of patent or homeopathic medicines; (2) of the medicines commonly called "Dutch medicines"; (3) of any article or thing which, although used as a medicine, is not solely used as such, and is not mixed or prepared for use as a medicine.

The Society has suggested the addition of the words "unless containing scheduled poisons" to sub-sections (1) and (2), and to sub-section (3) the words "if in wholesale quantities." Through the energetic action of the Society's officers the Bill has been at least delayed for a time, and meanwhile medical men of Bulawayo have also risen up in arms against it, especially objecting to the nomination of members of the Medical Board by the Government. The doctors want a Medical Council like that at the Cape, on which four medical men are nominated by their colleagues, and three medical men and one dentist by the Government. They feel that they are not competent to deal with the pharmaceutical matters, and discourage the Bill as a whole. We have yet to await the result of the opposition, but the energy of the young Pharmaceutical Society appears so far to give promise of success, and the latest news which we have received shows that doctors and druggists have joined hands and appealed to Sir Alfred Milner in the matter. We may add that the Society now includes the whole of the qualified chemists and all the qualified assistants in South Rhodesia. Meetings are held every month, and special meetings as required. By the courtesy of Messrs. Moore & Co. the Society holds its meetings at their office, where also prescriptions of a pleasant nature are compounded for the alleviation of parched eloquence.

Colonial and Foreign News.

NEW DISPENSARY.—Mr. W. Boyer, late health officer at Klang, has opened a dispensary at 105 Waterloo Street, Singapore.

A NEW CARBONIC-ACID FACTORY has been opened in Bad Málúás, Hungary. The natural carbonic-acid gas is collected as it arises from the spring, and is then condensed into liquid carbonic acid.

THE BERLIN APOTHEKER-VEREIN has considered the new regulation for copying prescriptions on the medicine-bottles, and is to ask permission to do away with prescription-books, the double copying occupying so much time.

A DOCTOR'S DEATH.—Cholera is raging at Dehra Dun, a station in the North-West Provinces of India, one of the latest deaths reported being that of Mr. Campbell, a popular medical practitioner and proprietor of the local pharmacy.

VACCINATION IN JAPAN.—The Japanese Government have decided to make vaccination compulsory in Japan. All children must be vaccinated before they are 10 months old. The first re-vaccination is to take place at 6 and the second at 12 years of age.

CINNABAR.—A discovery of cinnabar has been made at Kauaeranga Creek, Thames, N.Z. A sample lot of 2 cwt. was recently sent to Auckland, where a company is to be formed to work the deposit. The Government is offering a bonus of 4*s.* per lb. for the first 100,000 lbs. of mercury produced in New Zealand.

SHOOK TOO HARD.—Edith Doone, a girl of 18, has brought an action in the Philadelphia Court against Frederick Farrow, a druggist. Farrow, who is a very athletic young fellow, visited the girl one evening, and shook both her hands so exuberantly that he inflicted serious injuries. She entirely lost the use of one hand, and the other may have to be amputated. \$25,000 damages are claimed. So an American cable says: it seems ridiculous to us.

GERMAN PERFUMERY MANUFACTURE has increased considerably during the last ten years. In 1891 the exports of perfume pomades, extracts, and other perfumes amounted to 1,370,600 kilos., valued at 6,398,000*m.*. They rose in 1895 to 1,405,100 kilos. (6,785,000*m.*), and in 1898 to 1,629,900 kilos. (7,939,000*m.*). Great Britain, British West Africa, British East India, and Dutch India are the principal buyers. Germany imports less perfume now.

POISONED BY CHLORATE-OF-POTASH TABLETS.—Miss Williamson, aged 27, a teacher in the China Inland Mission, Chefoo, was found unconscious in her room on May 24. Medical assistance was promptly at hand, but the young lady died shortly afterwards. Some chlorate-of-potash tablets were found in her pocket, and, on a *post-mortem* examination being made, it was found that she had swallowed some half-dozen similar tablets. Whether the case was one of death by misadventure or suicide was not clear.

THE VOLTA EXHIBITION AT COMO was completely destroyed by fire on Friday last. This was an exhibition which the good people of Como had got up to celebrate the centenary of Volta's death, and it contained many precious relics of the discoverer of the Volta pile, and these unfortunately have been destroyed, including the great electrician's original instruments and contrivances, his correspondence with Aldini, Humboldt, Gay Lussac, Galvani, and Banks, his note-books and records of experiments. The International Congress of Electricians and the *fêtes* in honour of Volta will still be held there.

ITALIAN TARIFFS.—The following are recent resolutions in regard to imports of chemical substances:—Glycerophosphate of iron will pay the usual duty imposed on medicines. Battle's iodine, beside paying 120 lire per dozen, on account of the alcohol in it, will pay manufacture duty of 25 81 lire per dozen. Milk food, or powdered sweetened condensed milk, is to be regarded as "sweets," and will pay 125 lire per dozen, instead of 100 lire as before. Malted infant's-food, however, is meal for children, and will pay the rate for tea-biscuit—viz., 60 lire per dozen. Blancard's *Sirop d'iodure de fer* and tannalbin (Knoll) will pay duty as medicaments.

THE N.A.R.D.—The first annual convention of the National Association of Retail Druggists will be held at Cincinnati on October 3. Since its inauguration at St. Louis last year the Association has been making steady and continual progress in many localities in the States towards the elimination of the cutter by securing the adherence of retailers to their programme. The work of securing the individual co-operation of manufacturers of proprietary preparations appears, however, to be proceeding less expeditiously. More progress in that direction is looked for, however, after the Cincinnati meeting, when it is hoped that a detailed statement of the attitude of every proprietary manufacturer in the country towards the N.A.R.D. will be submitted.

British Pharmaceutical Conference.

THE following is a complete list of the papers to be read at the meeting to be held at Plymouth on Tuesday and Wednesday, July 25 and 26:—

1. "Assay of Preparations Containing Pilocarpine and the Characters of Pilocarpine Nitrate and Hydrochloride," by H. A. D. Jowett, D.Sc.
2. "Three Natural Rubber-substitutes," by David Hooper, F.C.S., F.L.S.
3. "Notes on Terebene, B.P.," by Lewis Ough, F.L.S., F.C.S.
4. "Assay of the Official Liquid Extract, Wine, and Vinegar of Ipecacuanha," by E. H. Farr, F.C.S., and R. Wright, F.C.S.
5. "The Composition of Commercial Araroba," by Edwin Doward, F.C.S.
6. "*Delphinium Staphisagria*," by E. M. Holmes, F.L.S.
7. "The Alkaloidal Strength of Commercial Samples of the Official Preparation of Jaborandi," by R. Wright, F.C.S., and E. H. Farr, F.C.S.
8. "Glucose Estimation: Fehling and Picric Methods Compared," by R. H. Parker, F.C.S.
9. "Note on the Examination of Various Terpeneless Oils of Lemon in the Market," by T. H. Williams Idris, J.P., F.C.S.
10. "A Note on Carbon Disulphide," by William Elborne, M.A.
11. "Syrup of Balsam of Tolu," by E. H. Farr, F.C.S., and R. Wright, F.C.S.
12. "Almond and other Kernel-oils," by John C. Umney and R. S. Swinton.
13. "The Assay of Belladonna Plaster," by H. J. Henderson, Ph.C.
14. "Oil of Cardamoms," by E. J. Parry, B.Sc., F.I.C., F.C.S.
15. "Further Note upon Ferrum Redactum, B.P. 1898," by E. Saville Peck, B.A.
16. "Johore Ipecacuanha," by J. C. Umney and R. S. Swinton.
17. "The Bone-caves of Devon," by Hansford Worth.
18. "A Weight-burette," by E. Saville Peck.
19. "Analytical Notes on the B.P. Lozenges," by F. Davis, B.Sc.
20. "Note on Liquor Bismuthi et Ammonii Citratis," by F. R. Dudderidge, Ph.C.
21. "The Liberation of Carbonic Anhydride from Bicarbonates upon Heating," by C. S. Dyer.
22. "A Method for Determining the Acidity of Beers, Stout, and other Highly-coloured Liquids," by L. Guy Radcliffe.
23. "The Assay of the Liquid Extract and Wine of Ipecacuanha, B.P.," by W. A. H. Naylor and John J. Bryant.
24. "A New Form of Condenser," by E. W. Lucas.

THE PRIVILEGE of travelling to Plymouth by the Great Western Railway for single fare and a quarter, which Mr. Naylor, 38 Southwark Street, S.E., has obtained from the company, is extended to all members who propose to attend the Conference and to travel by the Great Western and Midland Railways. Certificates of membership will be forwarded to them upon their sending a stamped and addressed envelope to Mr. Naylor.

MR. J. DAVY TURNER, hon. local secretary, informs us that the Mayor of Plymouth (Alderman J. Pethwick, J.P.) is to invite the members of the Conference to a garden-party at his country residence, Down House, Yelverton, on Friday afternoon, July 28. Those who apply to Mr. Davy Turner for books of tickets by July 17 will receive invitations in due course.

THE PLYMOUTH AND WESTERN COUNTIES LIBERAL CLUB has, as we have previously intimated, at the request of the pharmacists of the Club, granted the privilege of honorary membership to those attending the Conference during their visit. Mr. Albert Webb, Secretary of the Club, now gives us official information on the subject, and adds:—"On behalf of the committee, I shall be happy to extend a hearty welcome to all who choose to avail themselves of the advantages the Club offers."

A GOVERNMENT officer at Maubin, Burmah, wired recently to the Vaccination Officer at Rangoon in the following terms:—"Please send sharp a cask of vaccine-lymph." Apparently he wants to vaccinate all Asia "sharp."

Westminster Wisdom.

DROPPED.

The following Bills have been allowed to die a natural death:—Adulteration (Food Products), introduced by Mr. Kearley; Mr. Faithfull Begg's Companies Acts Amendment; Midwives Bill, brought in by Mr. J. B. Balfour; Shops (Early Closing) Bill of Sir John Lubbock; and the Vaccination (Conscientious Objectors) Bill, the offspring of Mr. Boulnois. The second reading of Mr. Reckett's Petroleum Bill has been put off for six months.

FOOD-PRESERVATIVES.

The President of the Local Government Board has appointed a departmental committee to inquire into the use of preservatives and colouring matters in the preservation and colouring of food, and to report (1) Whether the use of such materials or any of them for the preservation and colouring of food, in certain quantities, is injurious to health, and, if so, in what proportions does their use become injurious; (2) To what extent and in what amounts are they so used at the present time. The committee consists of the Right Hon. Sir H. E. Maxwell, M.P., Professor Thorpe, V.P.R.S., Dr. Bulstrode, and Dr. Tunncliffe. Sir H. Maxwell has been appointed chairman of the committee, and Mr. C. J. Huddart, of the Local Government Board, will act as Secretary.

CANCER INCREASING.

On Tuesday evening Sir Charles Cameron, the member for Bridgeton (Glasgow), asked the President of the Local Government Board whether his attention had been called to the fact that the number of deaths registered as from cancer per million of the population of the United Kingdom had within the past thirty years more than doubled; and whether, in view of this increase, he would consider the expediency of appointing a Commission to inquire into the subject for the purpose, if possible, of devising means whereby the frequency of the disease might be diminished.

Mr. T. W. Russell, in reply, said the Local Government Board had, as opportunity had arisen, caused scientific research to be made into the natural history and causes of cancer, but he had been advised that in the present state of knowledge on the subject no useful purpose would be likely to be served by the appointment of a Royal Commission with regard to it.

Sir Charles Cameron has also called the attention of the Under Secretary for State for Foreign Affairs to the fact that the increase in the number of deaths from cancer in New York State has induced the State Legislature to endow a laboratory at Buffalo for the study of that disease.

CONSUMPTION OF "PATENTS" IN SCOTLAND.

In the House of Commons on Monday Sir John Leng asked the Chancellor of the Exchequer if he could state the amount of revenue derived from the sale of medicine-stamps in Scotland for the years ended March 31, 1898 and 1899 respectively.

Sir Michael Hicks-Beach replied that the stamp-revenue derived from the sale of patent-medicine stamps in Scotland was in 1897-98, 2,127*l.*, and in 1898-99, 2,142*l.* Patent-medicine vendors' Excise licences were also taken out to the value of 643*l.* in 1897-98, and 667*l.* in 1898-99.

If the object of this question was to obtain information, Sir John Leng has not been very successful. Obviously the sale of medicine-stamps in Scotland is no criterion of the amount of proprietary medicines consumed there, as the greater part are imported from England. The total revenue derived from the sale of medicine-stamps in Great Britain in the year ending March 31, 1898, was 260,852*l.*, while the number of licences issued in that year was 33,140, of which 2,574 were in Scotland. It thus appears that there are twelve retailers of stamped medicines in England and Wales for every one in Scotland, but of the revenue derived from the sale of stamps less than 1 per cent. is actually collected in Scotland. It would no doubt be interesting to know how much Scotland—indeed, every town in Great Britain—pays into the national Exchequer through the consumption of stamped medicines, but that is a question which neither the Chancellor nor any other official could possibly answer.

Pharmaceutical Society of Ireland.

COUNCIL MEETING.

THE Council met on Wednesday, July 5, at 67 Lower Mount Street, Dublin, at 3 o'clock, the President (Mr. R. J. Downes) in the chair. There were also present the Vice-President (Mr. Beggs), and Messrs. Michie, Grindley (Treasurer), W. F. Wells, jun., Bernard, and Dr. Walsh.

COMPANY-PHARMACY.

The REGISTRAR read letters which had been received in reply to the Council's resolution regarding company-pharmacy. The Guardians of Sligo unanimously adopted it. The Council of the Royal College of Surgeons of Ireland declined to interfere with the passing of the Companies (Medical Professions) Bill. The President and Council of the Royal College of Veterinary Surgeons; the Royal Veterinary College, Camden Town; and the New Veterinary College, Edinburgh, also replied, the second-named not taking action, and the last asking further particulars, which were supplied.

PHARMACY FOR MEDICAL STUDENTS.

A letter from the Secretaries of the Royal University of Ireland (Sir J. Creed Meredith and Dr. McGrath) stated, in reply to an inquiry from the Council, that certificates of having compounded medicines under a pharmaceutical chemist were no longer accepted by that University; and accompanying the letter was a pamphlet containing the following regulation of the University on the subject:—

Practical Pharmacy.—A three-months' course with lectures on at least two days in the week given in a recognised school, in a properly equipped laboratory, by a duly appointed lecturer in pharmacy. (This course may be attended before, at the same time, or after that in materia medica, but must be attended in the third year.)

Mr. WELLS: I think we should approach the Royal University on the subject. It is monstrous that they won't accept our certificates.

The PRESIDENT: They think their requirement is sufficient for a medical man, whose business is to prescribe.

Mr. WELLS: Yet we shall be told by-and-by that these men are competent to open and keep shops. I can produce a gentleman who went to one of those places, and can testify that they get no practical work. A young lady who had taken out a course at one of those schools came to me to learn pharmacy, and she did not know the graduations on a measure. That is the way they teach pharmacy in those classes. We should memorialise the Senate of the University saying that our men are well qualified to teach pharmacy; that hitherto they have accepted our certificates; and that now they have cut down their own requirement to a mere class attendance.

Mr. BERNARD: To make it easier for the students.

It was decided that the President should write to the Senate of the University on the subject.

ANALYSTS FOR GUARDIANS.

A letter dated June 27, from the Assistant-Secretary of the Local Government Board stated, in reply to a previous letter from the Council, that the Board had had under consideration the qualifications which candidates for the position of Public Analyst should possess, and they regretted that they could not see their way to recognise the certificates of the Pharmaceutical Society of Ireland as being sufficient evidence of analytical skill in the examination of drugs for the purposes of the Board's Regulations under the Local Government (Ireland) Act, 1898.

Mr. WELLS: They will not accept any man unless he is a Fellow of the Institute of Chemistry. They want a man who can test the purity of drugs, but being a Fellow of the Institute of Chemistry affords no guarantee that the man had been in the habit of analysing drugs. Lately a gentleman who was giving evidence before a Court as to the adulteration of an article was obliged to admit that he had never analysed the thing at all. A man might be a splendid chemist and yet know nothing about drugs.

The PRESIDENT: The question is as to ability to analyse

drugs in connection with drug-contracts. I hold that our examination fulfils entirely their original requirement that the person has had experience in the examination of drugs, and that he is competent to form an opinion as to their quality. They say they will not sanction the appointment of any person who shall be unable to satisfy them that he has had considerable experience in the analysis of drugs. Our licentiates have had "considerable experience in the handling of drugs," and we know that the analysis of drugs is a thing that must grow under everybody's hand. They require a diploma obtained in pharmacy, materia medica, and volumetric estimation obtained from a recognised examining body. These are all subjects in our examination. In one of yesterday's papers it is stated that "The Local Government Board require the Boards of Guardians to appoint chemists of repute to analyse the drugs supplied to the workhouses and dispensaries. The qualifications of the analyst must be as follows:—"He must be a public analyst"—how does he get his diploma or certificate that he is such but by election?—"already appointed as a Fellow of the Institute of Chemistry, have a well-appointed laboratory, and experience in the analysis of drugs." Unless our qualified men should go over to London and pass an examination there, they will not be accepted; we are the only body in Ireland that can grant a certificate such as they require. Mr. Barklie, of the Working-men's Institute, Belfast, is not a Fellow of the Institute of Chemistry. He is a Fellow of the Chemical Society, which is not an examining body; and that title is practically no qualification—it is only a courtesy. We have, I repeat, an examination which fulfils all the Board's requirements; outside of that our licentiates have experience in the examination of drugs; and, therefore, if our licentiate applying for the office has "a well-appointed laboratory," he should be eligible. I consider that the Local Government Board has no right to pass our licentiates over, and I think we should press this matter.

Mr. BERNARD: The wholesale trade in Ireland laugh at the Government analysts.

Mr. WELLS: When the Local Government Board wanted information as to what were fair prices for drugs they went to the wholesale houses instead of coming to us.

The PRESIDENT: The following appears in a newspaper report of the proceedings of the Lisburn Guardians:—

The Clerk read a letter from the Local Government Board stating that before they can sanction the appointment of Mr. Robert Barklie to the position of analyst of drugs for the Union they must be satisfied that he has had considerable experience in the analysis of drugs, and has, after examination, obtained a diploma in pharmacy, materia medica, and volumetric examination of drugs from a recognised examining body.

I am informed that Mr. Barklie does not possess these qualifications, yet his appointment has been ratified.

Mr. MICHIE remarked that he did not think the Local Government Board would object to a pharmaceutical chemist. But the Society did not certify that their licentiate was an analytical chemist. In England a pharmaceutical chemist was not appointed to a position of the kind unless he was acquainted with analytical chemistry. There was nothing to prevent the licentiates of the Society from getting qualified in that respect.

Mr. WELLS said he disagreed with Mr. Michie. A great many of the analysts in England had passed no legal examination whatever. Perhaps many of the Society's licentiates were not well up in the work in question; but a great many others from their training and study were well able to test and report on the purity of drugs.

Mr. BERNARD: The point we have to impress on the Local Government Board is the necessity of having a practical pharmaceutical chemist who has passed an examination such as ours, in addition to having whatever other qualifications they may require.

Dr. WALSH: We should point out to them that ours is the only examination that embraces the three subjects which they mention.

Mr. BERNARD: We should bring home to them that their analyst should be a trained pharmacist, with the necessary qualification in chemistry; but a chemist who has been only trained as such should not be allowed in. You might as well appoint a chemist to be a tea-taster.

On the motion of Mr. WELLS, seconded by the VICE-PRESI-

MENT, it was resolved to ask the Local Government Board to receive a deputation on the subject.

PRIZE FOR CHEMISTRY DECLINED.

A letter was read from Mr. Forbes Watson, the Society's examiner in chemistry, in which he said:—

In order to encourage independent practical work and reading among the junior members of the Society, I am willing to give two prizes, to take the form of medals, or their value (say, five guineas each) in books, instruments, or money. I suggest that one prize be given for the best preparation of a chemical substance, preferentially organic, and that the other be given for the best essay on a subject to be set by me. I think that all students, assistants, or members who have not been qualified for more than five years on December 31 next should be eligible for the competition.

The PRESIDENT: Well, I think we should be very much obliged to Mr. Forbes Watson for his kind and generous offer, but I think it would be premature for us to accept it for this reason—that we might not have the pleasure and profit of Mr. Watson's help for more than a year; and then who would follow it up? Would the medals have to be dropped after he went, or would the Society be prepared to give them each year for the same work?

Dr. WALSH: I think that as long as he wishes to give the medals we should take them.

The PRESIDENT: The matter was referred to the School Committee.

Later on a report of the School Committee was read which stated that they highly appreciated Mr. Watson's offer, but they considered that at present it would not be advisable to accept it.

DONATIONS

were received from the Smithsonian Institute of pamphlets entitled "The Revival of Alchemy," "An Undiscovered Gas," "Fluorine," "Recent Progress in Physiology," and "Mescal: a New Artificial Paradise," and, from the Editor of THE CHEMIST AND DRUGGIST, of a copy of a new edition of Proctor's "Pharmaceutical Testing." On the motion of Mr. GRINDLEY, seconded by Mr. WELLS, thanks were voted to the donors.

HONORARY MEMBERS.

The PRESIDENT moved the following resolution pursuant to notice:—

The Council may elect to honorary membership persons of eminence in pharmacology and its kindred subjects. Such honorary members shall have the privileges of members, but shall not be licentiates of the Society, nor shall they exceed the number of twenty at any time, nor shall more than three be elected in any one year.

He thought the Society might very well have the power which he proposed; other societies possessed it. They could in this way compliment men of scientific distinction, whose acceptance would be an honour to the Society. He did not know whether that resolution, if passed, would be sanctioned by the Privy Council or not; but it would not be contrary to their Acts of Parliament, for at present the original members of the Society were honorary members. He would, however, formally propose the resolution, and leave the Council to deal with it as they thought proper.

The VICE-PRESIDENT: We need not elect anyone if we do not like.

The PRESIDENT: I had a letter to-day from Professor Titchborne, who has been unable to attend this meeting, in which he says he thinks ten honorary members would be sufficient.

Mr. WELLS: Have you power under your Acts of Parliament to elect honorary members?

The PRESIDENT: The approval of the Privy Council has been given to regulations not altogether within our Acts. There is nothing repugnant to them in this proposal.

Mr. MICHIE: I do not think it would be any harm to have honorary members.

Mr. WELLS: What privileges would you confer on them?

The VICE-PRESIDENT: They should have power to vote.

Mr. MICHIE: No; I would not give them the power to vote.

The PRESIDENT: I will postpone the resolution to another day, if you wish. There is no hurry about it. It is not seconded.

The VICE-PRESIDENT: I second it with pleasure, to see what comes of it.

Mr. BERNARD moved an amendment that the discussion of the subject be adjourned to next meeting.

Mr. MICHIE seconded the amendment, which was agreed to.

PAYING MEMBERS.

On the motion of Mr. GRINDLEY, seconded by Mr. WELLS, Mr. John Morrison Torrens, of Youghal, was elected a member of the Society.

Mr. Robert J. Savage, of Dublin, and Mr. H. A. Patterson were nominated for membership.

Other business having been disposed of, the Council adjourned.

PRELIMINARY EXAMINATION.

The following have passed:—E. J. Burke and E. E. W. Young (equal), Mary M. Stanton, A. Williams, R. H. Lowe, Matthew Murphy, T. Stack, W. Harnett, A. Bennett, J. Campbell and Sarah E. Dimond (equal). Eight have been rejected.

Personalities.

MR. A. B. EVANS, of Messrs. Evans & Sons (Limited), Montreal, is now visiting this country.

MR. J. D. DUNCAN, chemist and druggist, has been appointed sub-postmaster of the Union Street Post-office, Aberdeen.

THE foundation-stone of a new Presbyterian church at Tranmere was laid on July 8 by Mr. J. J. Evans, J.P., C.C., a member of the firm of Evans, Sons & Co., Liverpool.

MR. RICHARD TETLEY GLAZEBROOK, M.A., F.R.S., Principal of University College, Liverpool, has been appointed director of the National Physical Laboratory about to be erected in the Old Deer Park at Richmond.

MR. B. H. SPILSBURY, of Magdalen College, Oxford, has obtained second-class honours at the School of Physiology, Oxford. He is the elder son of Mr. J. Spilsbury, of Blackwell, Hayes & Spilsbury, Birmingham and Moseley.

THE PRIZE of 500 guineas, offered by the Sulphate of Ammonia Committee for the best essay on "The Utility of Sulphate of Ammonia in Agriculture," has been awarded to Mr. James Muir, M.R.A.C., Instructor in Agriculture to the Somerset County Council. Seventy-three essays were sent in.

BRO. R. W. BOWERS, P.M. 15 and W.M. 1,321, M.E.Z. Anglo-American Chapter, lectured to the Kennington Lodge of Instruction the other night on "King Solomon's Temple: its Builders and Destroyers." Mr. Bowers showed as much intimacy with the subject as he does with up-to-date printing.

MR. GEORGE BEILBY, the President of the Society of Chemical Industry, is a son of an Edinburgh doctor, and was born in Auld Reekie in 1850. He studied science in its university, and became interested in shale in 1877. He has a mind fertile in invention, which enabled him to stave off the ruin of the shale-industry by American petroleum. Early in the seventies he worked on sulphocyanides, and this work came handy in 1891, when the demand for cyanide by gold-seekers set him to work on this. He established a cyanide-factory in Leith, which was afterwards transferred to Glasgow to the Cassel Company. This practically saved an industry to Britain.

A HANDY starch-test for iodine—when you do not happen to have muc. amyli ready made—is to place a drop of the liquid on a cachet, the characteristic purple tint showing at once if free iodine is present. So a subscriber in China informs us.

A VETERAN PHARMACIST, on retiring from business, writes to us: "I have subscribed to THE CHEMIST AND DRUGGIST since its first number (a long time ago), and I shall still pop into my successor's to scan over the always interesting information" (2/89).

Pharmaceutical Society of Great Britain.

"First" Examination.

THE following are the questions given on Tuesday, July 11:—

LATIN.

(Time allowed—from 11 A.M. to 12.30 P.M.)

I. For all Candidates. Translate into Latin:—

1. I will answer neither you nor your friend.
2. Ambassadors were sent to the king on the next day.
3. Does not experience teach us very many things?
4. This man must be avoided by me.
5. The army, which had been raised by the king, arrived in Gaul.

II. Translate into English either A (Caesar) or B (Virgil).

A.—CAESAR.

1. Post ejus mortem nihilo minus Helvetii id, quod constituerant, facere conantur, ut e finibus suis exeant. Ubi jam se ad eam rem paratos esse arbitrati sunt, oppida sua omnia, numero ad duodecim, vicos ad quadringentos, reliqua privata aedificia incendunt, frumentum omne, praeterquam quod secum portaturi erant, comburunt, ut, domum reditionis spe sublata, paratior ad omnia pericula subeunda essent: trium mensium molita cibaria sibi quemque domo efferre jubent.

2. Ei legationi Ariovistus respondit: Si quid ipsi a Caesare opus esset, sese ad eum venturum fuisse; si quid ille se vellet, illum ad se venire oportere. Praeterea se neque sine exercitu in eas partes Galliae venire audere, quas Caesar possideret; neque exercitum sine magno commatu atque emolumento in unum locum contrahere posse: sibi autem mirum videri, quid in sua Gallia, quam bello vicisset, aut Caesari, aut omnino populo Romano negotii esset.

Grammatical Questions.

(For those only who take Caesar.)

1. Give the gender, genitive singular, and the English of *agmen*, *annus*, *cornu*, *ditio*, *initium*, *mens*, *opus*, *res*.
2. Give the principal parts of all the verbs in Passage 1.
3. Write in Latin:—13, 47, 96, 200, 16th, 19th, 87th, one-fourth three times a day.
4. Explain the following terms, and give one example of each:—*deponent verb*, *anomalous verb*, *ablative absolute*.

B.—VIRGIL.

1. Talia flammato secum dea corde volutans, Nimborum in patriam, loca feta furentibus austris, Aedoliam venit. Hic vasto rex Aeolus antro Luctantes ventos, tempestatesque sonoras Imperio premit, ac vinclis et carcere frenat. Illi indignantes, magno cum murmure montis, Circum claustra fremunt: celsa sedet Aeolus arce, Sceptra tenens, mollitque animos, et temperat iras.

2. Namque videbat, uti bellantes Pergama circum Hac fugerent Graii, premeret Trojana juvenus: Hac Phryges; instaret curru cristatus Achilles. Nec procul hinc Rhesi niveis tentoria velis Agnoscit lacrimans: primo quae prodita somno, Tydides multa vastabat caede cruentus; Ardentisque avertit equos in castra, priusquam, Pabula gustassent Trojae, Xanthumque bibissent.

Grammatical Questions.

(For those only who take Virgil.)

1. Give the gender, genitive singular, and the English of *cithara*, *complexus*, *cor*, *equus*, *fragor*, *officium*, *ops*, *scudle*.
2. Give the principal parts of all the verbs in Passage 2.
3. Write in Latin:—13, 47, 96, 200, 16th, 19th, 87th, one-fourth three times a day.
4. Explain the following terms, and give one example of each:—*deponent verb*, *anomalous verb*, *ablative absolute*.

ARITHMETIC.

(Time allowed—from 12.30 P.M. to 2 P.M.)

(The working of these questions, as well as the answers, must be written out in full.)

1. How many allotments, each 16 sq. po. 4 sq. yd., can be made out of a field 16 ac. 21 sq. po. 4 sq. yd.?

2. If 6 cwt. 2 qr. 2 lb. cost 9*l*. 3*s*. 4*d*., what will 4 cwt. 2 qr. 7 lb. cost at the same rate?

3. The difference between two numbers is $2\frac{6}{11}$, and the smaller of them is $\frac{54}{11}$. What is the larger number?

4. Find the value of

2.86805 of 3 shillings + $8\frac{3}{4}$ of 4 shillings - 1.8 of 5 shillings.

5. A man sells 60 articles at a profit of 2*s*. 6*d*. each. What additional number must he sell at a profit of 3*s*. 4*d*. each so as to realise an average profit of 3*s*. 1*d*. on each article sold?

6. What sum must be invested in $2\frac{3}{4}$ per cent. Consols at 96*½* in order to derive an income of 16*l*. 13*s*. 4*d*.? [Neglect brokerage.]

The following question must be attempted by every candidate:—

7. A farmer's corn-land yields at the rate of 60 hectolitres per hectare. How many bushels is this per acre?

ENGLISH.

(Time allowed—from 3 P.M. to 4.30 P.M.)

1. Analyse:—

"The long-remember'd beggar was his guest,
Whose beard descending swept his aged breast;
The ruin'd spendthrift, now no longer proud,
Claim'd kindred there, and had his claims allow'd."

2. Parse fully:—

"Who can direct when all pretend to know?"

3. Correct the following sentences, giving your reasons:—

- (i.) This is the man whom you said was guilty.
- (ii.) This house has been furnished by a cousin of the owner's.
- (iii.) I cannot run so fast as him.

4. In the following passage supply the necessary capital letters, and put in the stops and the inverted commas where necessary:—
are the officers gone i asked and oh ow my hopes hung upon the answer they are said he looking somewhat disconcerted why do you ask i wish you had kept them i answered solemnly enough although my heart at that same moment leaped with exultation master i must not conceal from you the truth the servants on this estate are in a dangerous condition and mutiny has long been brewing

The following question must be attempted by every candidate:—

5. Give, briefly, the outline of one of Shakespeare's plays, or of one of Scott's prose works, or the history of some scientific discovery.

Jacob Bell Scholarships.

THE examination for these scholarships was held on Tuesday simultaneously with the "First" examination. The following are the questions given and the instructions to the candidates:—

Time allowed—Three hours (11 A.M. to 2 P.M.).

In awarding marks the neatness and legibility of the writing will be taken into account.

Notice.—In framing answers, candidates should not enlarge upon the questions, but should confine themselves to giving, as briefly and clearly as they can, the information required.

LATIN.

1. Translate into English:—

"Adsit laetitiae Bacchus dator, et bona Juno;
Et vos, O coetum, Tyrii, celebrate faventes."
Dixit, et in mensam laticum libavit honorem;
Primaque, libato, summo tenus attigit ore.
Tum Bitiae dedit increpitos: ille impiger hausit
Spumantem pateram, et pleno se proluit auro:
Post alii proceres. Cithara crinitus Iopas
Personat aurata, docuit quae maximus Atlas.
Hic canit errantem Lunam Solisque labores;
Unde hominum genus et pecudes; unde imber et ignes;
Arcturum pluviasque Hyades geminosque Triones:
Quid tantum Oceano properent se fingere soles
Hyberni, vel quae tardis mora noctibus obstet.
Ingeminant plausu Tyrii, Troesque sequuntur.
Nec non et vario noctem sermone trahebat
Infelix Dido, longumque bibebat amorem;
Multa super Priamo rogitant, super Hectore multa;
Nunc, quibus Auroraes venisset filius armis;
Nunc, quales Diomedis equi; nunc, quantus Achilles.

2. Translate into English:—

(a) *Medicamina, quae in pharmacopoeiam non sunt recepta, attamen passim a medicis praescribi et hinc in pharmacopoliis praesto esse solent, optima indolis nec inquinata nec corrupta sint oportet.*

(b) *Quantum id quod destillaveris acidi hydrocyanici contineat ratio infra descripta examina; deinde dilue tanta quantitate aquae quanta sufficiat ut mille partes unam acidi contineant.*

(c) *Macera per quadraginta octo horas. Quo tempore elapso, collige liquorem defluentem in lagena noti ponderis donec quantitas liquidi pondus octoginta quinque grammatum attigerit. Liquorem collectam in balneo aquae destillando a spiritu vini libera, residuum ad extractum tenue evaporando redige.*

3. Parse fully:—"Cithara crinitus Iopas personat," aurata, docuit quae maximus Atlas."

4. Translate into Latin:—

(a) "If," said the philosopher, in answer to the question of his brave young son—"if in our great calamities we had been spared by the conquering Romans, we should have pitied them now."

(b) The general made answer as follows:—"The enemy that you have been so long seeking is now only two miles distant; prepare then to conquer or to die. I will send spies to bring me word of their numbers and the position of their camp; this done I must entrust the rest to you."

ENGLISH.

1. Parse fully:—

"I could myself
Take up a brace o' the best of them."

2. Write a short essay on one of the following subjects:—

- (a) Our Colonies.
- (b) "The noblest vengeance is to forgive."
- (c) "Si vis pacem, para bellum."

ARITHMETIC.

1. The carpeting of a room, twice as long as it is wide, at 5s. per square yard, cost 6*l.* 2s. 6*d.*; and the painting of the walls, at 9*d.* per square yard, cost 2*l.* 17s. 9*d.* How high are the walls?

2. Simplify $246 - 230 + 44$
 $3 + 127 + 19$

3. A solution contains 15 grammes of salt to 1 litre of water. How many ounces must be added to 1 gall. of it, in order that 1 quart of the solution may contain $2\frac{1}{2}$ oz.?

FRENCH or GERMAN.

FRENCH.

1. Translate into English:—

George, appelé dans un âge avancé à gouverner un peuple dont il n'entendait point la langue et chez qui tout lui était étranger, se regardait comme l'électeur de Hancvre plutôt que comme le roi d'Angleterre; toute son ambition était d'agrandir ses Etats d'Allemagne; il repassait presque tous les ans la mer pour revoir des sujets dont il était adoré. Au reste, il se plaisait plus à vivre en homme qu'en maître; la pompe de la royauté était pour lui un fardeau pesant; il vivait avec un petit nombre d'anciens courtisans qu'il admettait à sa familiarité; ce n'était pas le roi d'Europe qui eût le plus d'éclat, mais il était un des plus sages, et le seul qu'on connût sur le trône les douceurs de la vie privée et de l'amitié.

2. Translate into French:—

I have read somewhere that the vizier of Caliph Mostady, having gained a complete victory over the Greeks, and made their Emperor prisoner, asked the latter what treatment he expected at the hands of his conqueror. "If you wage war like a king," nobly replied the Emperor, "send me back to my country; if you are a disguised merchant, sell me; if you are a butcher, kill me."

GERMAN.

1. Translate into English:—

Philipp II. hoffte die holländischen Provinzen wieder zu erobern, wenn sie ihres Hauptes, des Prinzen Wilhelm von Oranien, beraubt würden. Er hatte deshalb einen hohen Preis darauf gesetzt, wenn jemand ihm denselben lebendig oder todt ausliefern würde. Der erste, der den Versuch machte, war ein Franzose. Er begab sich nach Antwerpen, wo der Prinz sich aufhielt, überreichte ihm eine Bittschrift, und während er sie las, schoss er eine Pistole auf ihn ab. Der Schuss verwundete den Prinzen zwar gefährlich, aber nicht tödlich. Noch andere Versuche, den Prinzen zu ermorden, wurden gemacht. Endlich übernahm es ein Franzose, Balthasar Gérard. Er trat in den Dienst des Prinzen und zeigte solchen Eifer für die reformirte Religion, dass der Prinz ihn sogar zu einem geheimen Geschäft gebrauchte. Für Geld, das ihm derselbe geschenkt hatte, kaufte er Pistolen, die er jede mit drei Kugeln lud. Am 10. Juli 1584

stellte er sich an die Thür des fürstlichen Speisesaals, während der Prinz zu Tische sass, und schoss nach ihm, als er nach der Mahlzeit heraustrat, so geschickt, dass er neiderfiel und gleich darauf starb.

2. Translate into German:—

Then said Æneas to Anchises: "Sit on my shoulders, dear father; I will carry thee. The little Ascanius shall go with me, and my wife shall follow me. And ye servants of my house, listen to me: There is a Temple of Ceres, and an old tree, not far from the gate of the city. Go to that place, and I shall find you there." As he spoke he put a cloak upon his shoulders, and the old man sat thereon.

CHEMISTRY.

(Time allowed for this and the two following subjects—two hours, from 3 P.M. to 5 P.M.)

1. How is nitric acid prepared? Write equations showing the action of strong nitric acid upon (a) metallic copper, (b) ferrous sulphate.

2. Describe two experiments by which the composition of water may be demonstrated.

PHARMACY.

1. Describe percolation and re-percolation. Give pharmacopoeial examples of the application of each. How would you recover the alcohol left in tincture-mares?

2. How is tincture of opium B.P. 1898 prepared? Suppose you had two samples of opium, one containing 13 per cent. and one only 9 per cent. of morphine—In what proportion must they be mixed to enable the powder to be used for the official preparations?

BOTANY.

1. On what parts of the plant are stomata most abundant? What is their function?

2. Give a short account of the germination of an ordinary bean.

Examinations in Edinburgh.

THE Board of Examiners for Scotland concluded their July session on Monday, in the course of which 166 Minor candidates were examined, and the following 57 passed:—

Adam, Charles, Monymusk
Aird, George Henry, Gateshead
Alcock, Alfred Henry, Sheffield
Alexander, T. B., South Shields
Billington, S. P., Manchester
Blake, William C., Edinburgh
Bolus, George, Glasgow
Borthwick, G., Cambuslang
Boyd, Thomas, Glasgow
Brown, Alfred P., Edinburgh
Chew, James K., Edinburgh
Coates, Henry, Manchester
Cran, John Thomas, Peterhead
Denton, Heron H., Gateshead
Dewar, Donald, Portree
Dickson, Robert, Johnstone
Downey, John S., Newcastle
Ferguson, Thomas W., Partick
Findlay, Alexander, Edinburgh
Fyfe, John Henry, Glasgow
Galbraith, Walter S., Glasgow
Gibb, William, Edinburgh
Gilmour, James P., Glasgow
Gordon, Edward, Glasgow
Heap, Thomas H., Manchester
Hill, George G., Edinburgh
Jackson, Robert E., Tynemouth
Jamieson, Martin, Edinburgh
Kennedy, William, Selkirk

Leadbetter, D. A. B., Kirkcaldy
Loves, Frederick, Blackhill,
co. Down
Mitchell, Thomas R., Glasgow
Mackinnon, Thomas Govan,
Mason, Peter, Peebles
Mercer, William, Edinburgh
Michie, L. P., Edinburgh
Milne, Peter D., Aberdeen
Morgan, Arthur Ewart, Lenzie
Morris, Robert L., Glasgow
Murray, Alexander, Aberdeen
Parker, James, Glasgow
Ritchie, Andrew W., Langholm
Roberts, John, Edinburgh
Shearer, George, Edinburgh
Skinner, John, Kinghorn
Soddy, Francis W., Glasgow
Spencer, H. E., Edinburgh
Swanson, John S., Edinburgh
Turnbull, William, Edinburgh
Wadsworth, G. R., Edinburgh
Walls, John, Glasgow
Watt, David, Lochee
Weir, Alexander, Peebles
Whitaker, J. E., Edinburgh
Wilford, John H., Nottingham
Wilson, Ralph, Dunfermline
Wood, Septimus R., Edinburgh

One Major candidate was examined, and failed.

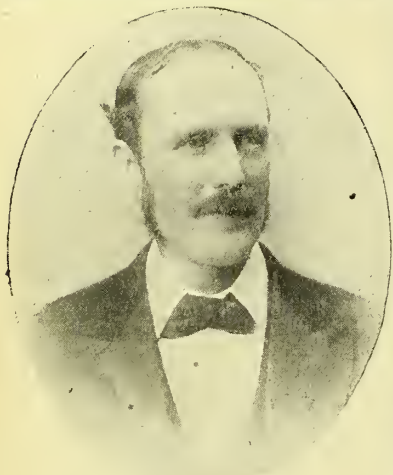
"PRACTICAL METHODS OF URINE-ANALYSIS."—The preface to this work predisposes one to regard with favourable anticipation what is to follow; there is hope that theory and severe technical terms will be reduced to shop-talk and shop-practice. The student will not be disappointed in this respect, and the pharmacist who realises that work in urine-analysis is a proper and profitable addition to his duties will appreciate and find value in this work by an experienced member of his profession.—*Pharmaceutical Era*. [Published by the C. & D. Price 1s 6*d.*; by post 1s 8*d.*]

Society of Chemical Industry.

Annual Meeting in Newcastle.

THIS, the most cosmopolitan of our scientific societies, has Newcastle-on-Tyne for a meeting-place this year, and a Scotchman, Mr. Geo. Beilby, for President. The programme presented to the members by the local committee was exceedingly attractive, and as the proceedings of the annual meeting are always rather formal, it is no discredit to those who had the onus of that affair to say that the 130 members who assembled in the chemical theatre of the Durham College of Science took the annual reports and

the presidential address as *hors-d'œuvre*. The lecture-theatre of Durham College is one of the brightest of meeting-places, but there were some empty benches when Mr. George Beilby, accompanied by the Council, stepped on to the platform at 10.35 A.M. The Council had been discussing the arrangements and the good points of the new officers. The President-elect, Professor C. F. Chandler, of New York, has been objected to



MR. GEORGE BEILBY.

because he is a low-flash man, and had the courage to adopt fresh opinions in that direction some eight years ago. The Council was unduly cautious, for, as it turned out, there was nothing to fear. When order was called we noticed, amongst those present, Messrs. A. H. Allen (Sheffield), F. W. Branson (Leeds), David Howard (London), N. H. Martin (Chairman-elect of the Local Section), B. E. R. Newlands (London), J. B. Payne (Newcastle), Boverton Redwood (London), E. C. C. Stanford, C. E. Stewart (Newcastle), T. Tyrer (London), W. Watson Will (London), and S. W. Woolley (London).

The business began with the reading by the Secretary (Mr. Cresswell) of the minutes of the meeting held at Nottingham last year, and before they were finished a quaint touch was given to the proceedings by the arrival of the Mayor of Newcastle (Mr. G. Harkers), who wore his chain and sword of office. His Worship in a short speech welcomed the members to Newcastle, and hoped that their illusions as to the city being a smoky one would be dispelled after a visit to some of its beauty-spots.

THE NEW COUNCIL.

The alterations in the method of election, which were sanctioned last year, by which, when there is an equal or less number of names proposed as there are vacancies no election is needed, came into operation and saved the necessity of a ballot. The following is the list which the meeting unanimously approved of:—

President.—Professor C. F. Chandler, M.D., Ph.D. (of New York).

Vice-Presidents.—George Beilby; R. Forbes Carpenter; Professor F. Clowes, D.Sc.; George E. Davis; John Heron; David Howard; Dr. C. A. Kohn; Ivan Levinstein; B. E. R. Newlands; Dr. Edward Schunck, F.R.S.; William Thorp, B.Sc.; R. C. Woodcock.

Ordinary Members of Council.—Sir John Evans, K.C.B., F.R.S.; Sir David Gamble, Bart., C.B.; W. Winwood Gossage; E. Grant Hooper; Dr. Rudolph Messel; J. M. C. Paton;

John Pattinson; Dr. Fred B. Power; Sir Robert Pullar; Walter F. Reid; Dr. William S. Squire; E. C. C. Stanford.

Hon. Treasurer.—Samuel Hall.

Hon. Foreign Secretary.—Dr. Ludwig Mond, F.R.S.

General Secretary.—Charles G. Cresswell.

The President requested the Secretary to read a letter he had received from Professor Chandler, in which he accepted the office of President, and suggested that Mr. G. Beilby, the present President, should be appointed to act in his absence on account of his inability to be at the meeting.

Professor Chandler, the new President, is Professor of Chemistry at the New York College of Pharmacy, and holds a similar appointment in Columbia University, New York. He is the leader of organic chemistry in the United States, and a man of great ability, whose services were sought last year by the Parliamentary Committee which inquired into the evils or otherwise of low-flash petroleum oil. His election as President of the Society is intended to more closely bind the American members of the Society to the parent, and at next year's meeting it is expected that Professor Chandler will be accompanied by leading American members, some of whom will be visiting the Paris exhibition.

REPORT OF THE COUNCIL.

This recorded the fact that the membership of the Society had increased from 3185 last year to 3,312. Special reference was made to the loss, through death, of Mr. E. Rider Cook, Hon. Treasurer of the Society since its foundation, and President in 1890-91. With untiring industry and courtesy he laboured for the good of the Society, and his genial presence and wise counsel are sorely missed by the Society. His brother-in-law and partner, Mr. S. Hall, has taken up the treasurership. The report proceeded to deal with the finances of the year, which are summarised below, and mentioned that at the beginning of this year the membership of the various Sections was as follows:—London, 812; New York, 580; Manchester, 400; Scotland, 300; Liverpool, 260; Yorkshire, 200; Newcastle, 108; and Nottingham, 75. The Society now pays the fares of sectional representatives attending the Council meetings. The Council notes with satisfaction that most of the Chairmen and Secretaries have from time to time been present at the meetings during the past session. During the year the Council and the two committees charged with the care of the *Journal* gave long consideration to the quality of the paper, type, and ink used for printing, with the result that this year's *Journal* has been printed with new type and better ink, on a paper free from adulteration and approved by the highest authorities. The report proceeded to refer to the relations of the Society with kindred bodies, such as the International Congress of Applied Chemistry and National Physical Laboratory, also to the proposed Hurter memorial lecture; and, dealing with the relations of the Society to chemical engineering and industrial research, expressed the hope that means will be found to give effect to the views advocated by the President in his address on April 14, suggesting courses of lectures on chemical engineering.

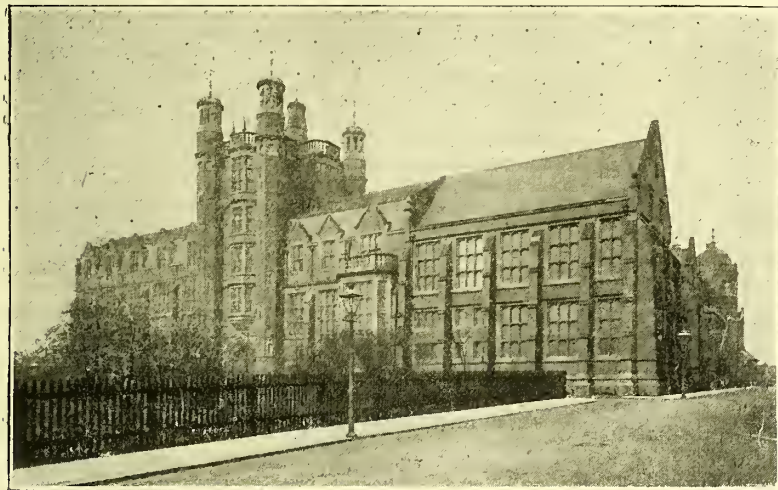
TREASURER'S REPORT.

Mr. Samuel Hall, the Hon. Treasurer, then submitted the annual financial statement. This showed that the amount received in subscriptions for the year was



PROF. CHARLES F. CHANDLER,
Ph.D., F.C.S., &c.

3,727l. 2s. 3d., and that 320l. 5s. 6d. accrued from entrance-fees and one composition-fee. Interest on the Society's investments amounted to 299l. 7s. 10d., and advertisements in and sales of the Society's *Journal* yielded 945l. 9s. 1d.; 4l. was also received on account of the Collective Index, making the total revenue for the year 4,975l. 19s. 2d. The expenditure for the year included 3,156l. 4s. 11d. *Journal* expenses, 1,823l. 18s. 9d. being publishing expenses, 1,323l. 11s. 2d. editorial expenses, and 3l. 15s. insurance of stock. Other items in the expenses were salaries and fees (413l.), office expenses (117l.), printing sundries, stationery, and bookbinding (97l.), sectional expenses, 363l. 15s. 3d. (ranging from 110l. for the London Section



THE DURHAM COLLEGE OF SCIENCE.

Established in 1871, and affiliated with the University of Durham. Was one of the first University Colleges to provide a pharmaceutical curriculum—which failed.

down to 9l. 5s. 10d. for the Newcastle Section), and expenses in connection with the Nottingham meeting (170l.). The total amount of investments held by the Society on December 31, 1898, was 9,709l. 7s. 2d.

In reply to a question by one of the members, the Treasurer said the actual expenditure on the Collective Index from first to last would be about 1,280l., which works out at about 10s. a copy.

Members who subscribed 5s., the estimated cost, some three or four years ago, congratulated themselves on having got a good bargain.

NEXT YEAR'S MEETING.

As Mr. Boverton Redwood, the Chairman of the London Section, had to leave by an afternoon train, he asked leave to introduce at once the subject of next year's meeting. He said that in the ordinary way the next meeting would be in London, but as it was possible that the members would be especially invited to attend the International Congress of Chemistry at Paris, which would be held during the Exhibition, he invited the Society to London, expressing the hope that under the conditions that may accrue it may be practicable to adjourn the meeting to Paris. The serious side of the Society would have to be considered, and he asked members to begin to prepare papers as soon as possible.

Mr. Newlands endorsed Mr. Redwood's invitation, and said he would try and arrange with the clerk of the weather for extra special meteorological conditions. (Laughter.)

Mr. T. Tyrer also spoke, and hoped that if they had to go to Paris they would all be able to obtain quarters at one spot, and feel as much at home in Paris as in London.

The way was now clear for

THE PRESIDENTIAL ADDRESS.

and on rising to deliver it Mr. Beilby was received with hearty applause. It was devoted to the coal and smoke problem. He said that our stores of fuel are being recklessly burned up, good authorities contending that our coalfields

will practically be exhausted in thirty to fifty years, while the atmosphere, not only of the large cities, but also of the manufacturing districts, is being increasingly polluted. As a result of almost daily observation of the conditions of the atmosphere over the belt of country which extends across Scotland from the Firth of Forth to the Firth of Clyde, the speaker had come to the conclusion that a general condition of smoke-haze is more prevalent now than it was ten to fifteen years ago. This, he contended, was due to the unblushing way in which large quantities of black smoke were emitted from industrial works and steamboats. A lantern-slide of a Clyde steamer was shown on the screen in the act of "spouting Indian ink over the landscape," as the President

put it. Reference was then made to the scientific investigation of chimney-smoke, and the means of measuring its intensity, the method of Mr. Donkin, wherein standard-tints are compared with the smoke, being especially mentioned. To place the questions of coal and smoke in their true scale and proportion, he considered it desirable to allocate the total coal-consumption of this country, which in 1893 was 157 million tons, of which seventy-six million tons were for the production of power, and forty-six million for the production of heat, for industrial purposes, and thirty-five million for the production of heat for domestic purposes. Railways consume ten to twelve million tons, coasting-steamers six to eight million tons, mines consume ten to eleven million tons, and factories consume thirty-eight to forty million tons for power; while for heat blast-furnaces consume sixteen to eighteen million tons, steel and malleable-iron works consume ten to twelve million tons, other metallurgical works consume one to two million tons, chemical-works, potteries, and glass-works consume four to six million tons,

and gasworks consume thirteen million tons. He considered that economy is absolutely necessary, and pointed out the remedies which have been suggested—viz., first, improved appliances for the combustion of raw coal and distribution of the air-supply in furnaces; second, the transformation of the raw coal into smokeless fuel by preliminary treatment, either by destructive distillation in gas-retorts or in coke-ovens, or by its conversion into fuel-gas by partial combustion in air and steam. He described the distillation of coal in retorts, blast-furnaces, and coke-ovens, and showed that the coal-consumption and by-products manufactured work out as follows:—

	Coal Consumed	Tar	Sulphate of Ammonia
	Tons	Tons	Tons
Gasworks	13,000,000	650,000	130,000
Shale-oil works	—	—	37,000
Blast-furnaces	20,000,000	150,000	18,000
Recovery-ovens	1,250,000	62,000	11,000
Present totals... ..	34,250,000	862,000	196,000
After extension of recovery-ovens	—	620,000	110,000
Probable totals	—	1,482,000	306,000

The effects of the natural development of these industries on the markets for by products were next considered. I was pointed out that, if any considerable part of the 157 million tons of coal which is at present burned in the raw condition were to be converted into gas, tar, coke, and ammonia, an altogether new condition of things would arise, and he considered that the natural outlet for the coke and tar would be in the

MANUFACTURE OF FUEL BRIQUETTES.

He believed that, with skill and enterprise, it would be possible to make briquettes exactly suited for every purpose from boiler-firing to domestic cooking. Having described the leading types of producers, he proceeded to consider the means of stopping waste, pointing out that engineers now recognised that steam-boilers could be economically and smokelessly fired either by careful hand-stoking or by the modern forms of mechanical stoker; also that if badly designed and built boilers at present in use were gradually weeded out and replaced by properly designed and built boilers, the fifty-seven million tons of raw coal used for steam-raising could be burned smokelessly. He considered that for small-power installations gas or electric motors are better and more economical. For railways and coasting-steamers an ample supply of smokeless briquettes could be procured by the extension of the coal-distillation industries. For metallurgical and chemical works of all kinds

FUEL-GAS

is the most suitable fuel, being smokeless and easily controllable. He thought the time was not far distant when centres for the production and distribution of fuel-gas would be established in industrial districts. There was nothing to prevent the economical distribution of fuel-gas to works within a mile or two of the producing-station. If this were accomplished, the conditions of life in industrial localities would be enormously improved, and in time the smoke-blots on the face of the country would be wiped out. Coming to the thirty-five million tons of raw coal which is burned for domestic purposes, he dealt with the present position of

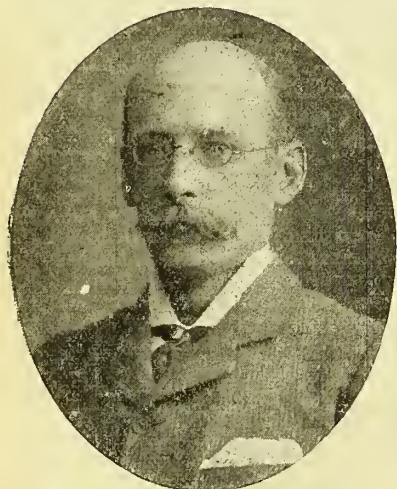
DOMESTIC GAS-FIRING

and its relation to heating and ventilation. The desiderata appeared to be warmth, comfort, and ventilation equal to what are obtainable by the use of an open coal fire and at a cost not more than twice as great; but there is still much to be done in making house "fires" suitable for gas. This led the speaker to inquire into the reasons for the comparatively slow adoption of gas-heating. He thought it was due to the combined effects of the average gas fire placed in position by the average gasfitter, and supplied with average gas at 3s. per 1,000 cubic feet. A description followed of a method by which cold air, admitted to a room where a gas fire was burning, was warmed, and a lantern-slide shown of a model gas fire in which the method was adopted.

For domestic heating the fuel briquette, if properly adapted for that particular purpose, might play an important part in the displacement of raw coal and smoky combustion. The President concluded by inquiring briefly into the reasons why these

REMEDIES WERE BEING SO SLOWLY ADOPTED.

He suggested that the self-interest of the manufacturer, as well as his public spirit, needs to be aroused. He advocated the application of gentle



MR. F. STIRLING NEWALL, J.P.,
Chairman of the Newcastle Section of the
Society.

but uniform pressure for the adoption of smokeless methods on consumers of raw coal by a central authority acting under the Government, and instanced the gradual but steady improvement in the character of the emanations from chemical-works which had resulted from the judicious administration of the Alkali Acts during the past thirty years. As a means

of bringing all of the different interests which are concerned in the matter into line, he suggested that the Society might arrange a conference on fuel and smoke, at which the leading technical societies, as well as the actual industries concerned, should be fully represented.

MISCELLANEOUS BUSINESS.

Mr. D. Howard, in proposing a vote of thanks to the President, said he thought the only person who would object to see his suggestions carried out would be the coal-merchant. He thought that perhaps if we in this country had not been able to obtain coal so cheaply attention would have long ago been directed to economy of fuel. The waste of fuel was simply amazing. One sometimes began to think that one's decimal point had gone wrong, considering the proportion of result to the coal burned. Many of them, doubtless, were using boilers which at this time would be better relegated to a museum of dangerous antiquities. (Laughter.) This touched all of them, and would touch their successors more. Might he say that, amid all the complaints of rivalries abroad, there were few things where the difference was greater between English manufacturers and their German rivals than in the scientific application of skill to the saving of coal? Their coal-bills were founded on slack at 2s. 6d. per ton. The Germans had never had the misfortune of using cheap fuel. Let them in England try to recover from the misfortune of cheap fuel before it was too late.

Mr. John Pattinson (Newcastle) seconded the motion, and said, as to coal-smoke, without the co-operation of the stoker it was impossible to prevent entirely, or to a great extent, the emission of black smoke.

Mr. G. Beilby was elected to represent the Society at the Imperial Institute in the place of the late Mr. E. Rider-Cook.

[SUBSEQUENT PROCEEDINGS.]

The members were photographed in the quadrangle of the College, after which they adjourned to luncheon in the Grand Assembly Rooms close at hand.

After luncheon many of the members accepted the invitation of the Chairman of the Local Section, Mr. F. Stirling Newall, and the Hon. Local Secretary, Mr. Saville Shaw, to view the College buildings. The College was established in 1871, and forms a part of the University of Durham. No religious tests are required from the students or anyone connected with the College. In addition to courses in natural sciences, there are literary and art sections. The chemical, physical, and engineering laboratories are among the finest of their kind in the country, and are each provided with a wealth of costly apparatus which, on viewing, made one long to begin one's science training over again.

A garden-party was held in the Leazes Park, close by, by invitation of the Mayor. The arrangements were perfect, but, unfortunately, a pitilessly wet afternoon spoilt the well-meant efforts of the promoters.

In the evening a reception and *conversazione* took place in the Natural History Museum. The guests, who were received by Mr. F. Stirling Newall, included a large number of people from the city and neighbourhood, besides about 150 members of the Society.

Varia.

THE total value of sandalwood exported from British New Guinea has been 21,235*l.*, or an average of 3,034*l.* per annum.

LIQUID CARBONIC ACID.—The low price at which this article sold in 1898 was not considered profitable by German manufacturers.

DURING 1898 drugs to the amount of 429*l.* (1897, 561*l.*) were imported to Tetnan (Morocco); olive oil, 750*l.* (1897, 135*l.*); saltpetre, 300 cwt., 330*l.* (1897, 150 cwt., 187*l.*).

CONSUL-GENERAL WOOD, stationed at Azerbaijan, Persia, in his annual report, says that first-class drugs of British origin are much sought after, and their cost willingly paid.

The Women's Congress.

BY A PHARMACEUTICAL WOMAN.

THE Congress is over. It opened brilliantly, and at its close members parted with regret. If it was a Niagara of talk, it was, like Niagara, a spectacle as well as a motive power. Taking the manner apart from the matter, the Americans are good speakers; they choose their words well, with now and then quaint turns of expression that are very telling, avoid redundancy, have a special aptitude for driving the nail well in, and so condense their matter that they seldom had to be rung down. Many of the English women spoil their papers by bad delivery and ignorance of how to manage their voices, and could not be heard in the large halls; and the evident strain they made to answer the calls of "Speak louder" transmitted itself to the audience, and broke up their attention. Therefore, when the dramatic section was on, great was the relief and comfort felt of listening to trained voices, and Mrs. Kendal's opening query, "Can you hear me distinctly at the back of the hall?" was answered by most grateful "Yes's," and not a syllable of her address, or those of the other actresses, was lost.

In the literature section diffuseness was very prevalent, and nearly every reader had to succumb to the bell; but the papers here were good, notably Mrs. Flora Steel's, whilst the short address by Mrs. Stetson, U.S.A., stirred everybody. Among the many really clever women present, this lady, by her strong individuality, made a great impression whenever she spoke; she is all fire; at once seizes and never loses the sympathies of her listeners; she wastes no time on preliminary details, but goes at once to the heart of her subject, and, a practised speaker, knows the value of the art of leaving off just when her listeners want her to say a little more. She urged that all work should be done on broad lines for humanity—a not untimely warning against the selfishness of women working only for women.

In the science section the effect of the mental training undergone by the speakers was noticeable; here precision, clearness, and accuracy in dealing with details were the rule, and I think nearly all the papers were within the limits of time.

A fair astronomer (Mlle. Klumpke), who read her paper charmingly, spoke with much quiet enthusiasm of her study, declaring that the very figures bore fascination. She deplored the non-existence of an observatory for women, and thought that if one were attached to one of the women's colleges in Cambridge it could be supported by women from the other colleges, especially by rich women.

Mrs. Percy Frankland suggested bacteriology as a science that could be well taken up by women, pointed out how we are only at the beginning of the possibilities that bacteriology opens out, and enlarged on the necessity of careful work and training.

In the discussion on botany one lady held out as an advantage that its study could be commenced at any age and without any previous scientific training, but I could not but agree with a later speaker, that if botany is to be carried on seriously and successfully as a profession it is very desirable that a trained mind should be brought to it, and that an acquaintance with chemistry would be a great help.

Miss Dorothy Marshall had something to say about women chemists, referring to the ability of women to undertake chemical research, of which several examples have recently been given in the Chemical Society.

In the educational section the psychology of childhood was exhaustively treated, first of all, in a masterly paper by Professor Earl Barnes, followed by thoughtful and earnest papers by women. This always seems to me a study for which women are fitted, but one that requires delicate and cautious handling; once let the little "tots" get the notion that they are being watched, that their doings and sayings are being noted, and good-bye to their naturalness and to the value of any observations you may make then.

The suffrage meeting scored high, and had much more the air of meaning business. Here all the popular women spoke. The audiences, largely made up of workers, keenly watched and criticised the "platformers," quick to recognise and cordially appreciate any originality, special thoroughness, or

knowledge possessed by speakers—equally quick to detect surface-knowledge and "talk." Sometimes one noted a swift interchange of glances, a raising of the eyebrows, and saw that the verdict on the speaker was—"Much she knows about it."

Some points were demonstrated during the progress of the Congress, showing that the women's movement is passing through the mill of evolution; thus, that women are getting more accustomed to having occupations; they talk less of themselves, more of their work. Man is ceasing to be a bogey; he is no longer dragged in as an aunt-sally to be pelleted. A feeling of comradeship is growing, especially in the science and social subjects. The shrieking sister is almost extinct, and with her also is passing away—unregretted—the dowdy. Some years ago I heard the earnestness of a celebrated worker doubted "because she always wore pretty bonnets." Now in this meeting, not only the headgear, but the whole attire of most of those attending was quite as dainty as that of their sisters who toil not; the oddly-dressed ones were conspicuous for their rarity.

Throughout the Congress the organisation was excellent, and a cheery goodwill prevailed. A special heed of thanks is due to the stewards, whilst the princely hospitality of the Rothschilds will not be soon forgotten; their lovely grounds at Gunnersbury were much admired. R. M. (61/18.)

The Optical Society.

THE adjourned first meeting of this Society was held on July 10, Mr. W. H. E. Thornthwaite (President) in the chair. The minutes having been read and confirmed, the election of the committee was proceeded with. After discussion, it was decided that the committee should be composed of twenty-one members—fourteen to represent London, and seven the country. An undertaking was given by some gentlemen present that if more than one member of their firms were elected one or other of them would resign. Vacancies, it was decided, should be filled by election. The voting-paper contained forty-one names, and 119 papers were returned, including forty which had come by post. Whilst the scrutineers were counting the votes in another room a discussion took place as to the name by which the Society was to be known, it being ultimately decided that it should be called "The Optical Society." A motion was also passed prohibiting members, on pain of expulsion, from using, letters or words after their names, for trade-purposes denoting that they were members of the Society.

Other discussions took place as to life-membership, and as to what work the Society should begin with; the former was postponed *sine die*, and in the latter case it was decided that the adoption of standard calibres and templates was a suitable subject to begin with. A long wait took place before the ballot was finally declared, with the following result, the numbers after the names indicating the votes recorded:—

London Members.—Dixey (75), Walmsley (62), Browning (59), Culver (59), Aitchison (59), Laurence (59), Kemp (56), Wood (56), Woolf (56), Paxton (55), Raphael (45), Grey (40), Marks (37), Purser (35).

Country Members.—Field (45), De la Cour (45), Willmott (43), Bennett (34), Luckie (32), Forshaw (30), Cox (30).

Mr. Marks (Botwright & Grey) resigned, in accordance with the undertaking given at the commencement of the meeting in regard to multiple representation.

"JUST see what handsome teeth Fraulein von Perge has." "Thank you. You're very complimentary." "Ah pardon me! You are perhaps her father?" "No—he dentist."

BING: "Yes, that's old Spriggings. Half-a-dozen doctor have given him up at various times during his life." Wing: "What was the trouble with him?" Bing: "He wouldn't pay his bills."

MRS. TREETOP: "I believe I'll let you get me a bottle of this medicine." Uncle Treetop (looking over the testimonials): "Not much. One of these critters says after she took a bottle she felt like a New Woman."

New Companies & Company News.

E. H. RICHARDS (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To take over the business of E. H. Richards, dental operator and mechanic, of 244 Gipsy Lane, Forest Gate. Registered office, 244 Gipsy Lane, Forest Gate, E.

JAMES SAMUELSON & SONS (LIMITED).—Capital 40,000*l.*, in 10*l.* shares. Objects: To take over the business of seed-crushers, oil-refiners, &c., carried on by a company of the same name near the West Float at Poulton, Ches., and at Liverpool. Registered office, 48 Castle Street, Liverpool.

YORKSHIRE INDIGO, SCARLET AND COLOUR DYERS (LIMITED).—Capital 400,000*l.*, in 1*l.* shares. Objects: To take over the business of several firms of dyers carrying on business in Yorkshire, and to acquire the dyers, dyeing, and chemical business of Pickles, Smithson & Pickles (Limited). Registered office, 23 John William Street, Huddersfield.

R. S. BROWNHILL & SONS (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To take over the business of "R. S. Browning & Sons," dyers, drug-merchants, grocers' and chemists' sundriesmen, &c., of Wellington Works, Saville Street, Leeds. The first directors are R. S. Brownhill, G. S. Brownhill (managing director), H. S. Brownhill, W. S. Brownhill, and F. S. Brownhill. Qualification, 100*l.*

JOHN WEISS & CO. (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of surgical-instrument and anatomical-appliance makers carried on as "John Weiss & Son" at 287 Oxford Street, W. The first directors are:—W. L. Hotchkin, F. Turton, and F. F. Weiss. W. D. Hotchkin and F. F. Weiss are permanent directors. Qualification 250*l.* Remuneration 680*l.* per annum, divisible.

SHUKER & PETHICK (LIMITED).—Capital 4,000*l.*, in 1*l.* shares. Objects: To take over the business of Charles B. Shuker, chemist and grocer, of Church Street, Launceston. The subscribers are:—C. B. Shuker, chemist; W. T. Pethick, grocer; Mrs. J. Shuker; and Mrs. F. J. Pethick, all of Church Street, Launceston; J. Shuker, View, Churchstoke, Salop, retired farmer; Mrs. A. M. B. Quance, 2 Belmont Villas, Devonport; and G. G. Shellchran, 7 Stafford Terrace, Plymouth, contractor. The first directors are C. B. Shuker and W. T. Pethick. Qualification, 200*l.* Remuneration as fixed by the company.

BROMPTON DENTAL INSTITUTE (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of dentists, dental operators, mechanics, and surgeons, &c. The subscribers are:—C. L. Lumley, M.D., 102 Brompton Road, S.W.; L. Roberts, M.R.C.S., L.S.A. Lond, 6 Essex Road, Willesden, N.W.; R. Davis, R.D.S. Eng., 223 New Kent Road, S.E., dentist; W. J. Julien, 36 Pickering Place, Bayswater, surgeon dentist; H. S. Planck, 446 Fulham Road, S.W., dental surgeon; F. Lloyd, 42 Bishopsgate Without, E.C., registered dentist; and F. J. Burke, 89 Upper Gloucester Place, N.W., surgeon dentist. Registered without articles of association.

HOLLINGWORTH & CO. (LIMITED).—Capital 500*l.*, in 10*s.* shares. Objects: To take over the business of a chemist, druggist, oil and colour man, &c., carried on at Kirkstall, Leeds, by F. W. Hollingworth, and formerly carried on as "E. Barrow." The subscribers are:—F. W. Hollingworth, chemist, and Mrs. B. Hollingworth, 40 Commercial Road, Kirkstall, Leeds; G. E. Bell, 62 Melville Place, Leeds, cashier; O. M. Overend, 7 Greenhill Terrace, Batley, secretary; W. Sadler, 152 Harehills Avenue, Leeds, clerk; J. Beacock, 10 Harehills Terrace, Leeds, clerk; and R. Farrar, 63 Gallhome Terrace, Leeds, sign-writer. The subscribers are to appoint the first directors (two to be permanent). Registered office, 40 Commercial Road, Kirkstall, Leeds.

PEARSE'S LINIMENT (PRELIMINARY) SYNDICATE (LIMITED).—Capital 6,000*l.*, in 1*l.* shares. Objects: To enter into an agreement with C. L. Baker and to manufacture and deal in "Pearse's Liniment," for neuralgia, gout, rheumatism, and the like. The subscribers are:—O. de la

Chapelle, 110 Cannon Street, E.C., solicitor; A. de Bearney, 120 Cannon Street, E.C., solicitor; T. Oliver, 34 Crewdson Road, Brixton, S.W., clerk; A. Grome, 27 Lombard Street, E.C., accountant; E. O. Baker, 1 Station Road, Buxton, estate agent; H. Graham, 30 St. Swithin's Lane, E.C., merchant; and D. Barclay, Abchurch Chambers, Abchurch Yard, agent. The subscribers are to appoint the first directors. Remuneration 10*l.* each per annum and 75*l.* for the chairman. Registered office, 30 St. Swithin's Lane, E.C.

S. DARKE (LIMITED).—Capital 1,000*l.*, in 5*l.* shares. Objects: To acquire the business carried on at 2 South Frederick Street, High South Shields, Durham, by S. Darke, and to carry on (through qualified assistants and managers, where necessary) the business of chemists, dyers, druggists, oil and colour men, patent-medicine vendors, &c. The subscribers are:—S. Darke, drug-dealer, and Mrs. M. J. Darke, 2 South Frederick Street, High South Shields; W. J. Stockdale, Market Place, Thirsk, North Riding, Yorks, chemist; F. W. Usher, 12 Grange Road West, Jarrow, Durham, shipbuilder; F. A. Johnson, Brooklands, 134 Harehills Avenue, Leeds, chemist; and T. Johnson, grocer, and Mrs. I. Johnson, 90 Buddle Road, Elswick, Newcastle-on-Tyne. S. Darke is a permanent director, and may appoint others.

JOHNSON'S SACCARUM COMPANY (LIMITED).—On July 8 Mr. Justice North had this company's scheme for enlarging again before him, when counsel for the company said the directors had considered his Lordship's suggestion as to altering the title, and did not think it would be desirable, but they would strike out the words from the petition—"carrying on the trade or business of chemical manufacturers in all its branches." His Lordship on this understanding sanctioned the petition.

THE INVITATION to subscribe to Boots, Cash Chemists, Lancashire (Limited) has received some adverse criticism from financial authorities. The *Outlook* thinks "the information given is utterly inadequate, and many of the statements made by way of information are ludicrous." *Finance* says that "the prospectus contains no evidence of the vendors' ability to guarantee the dividend, nor is it stated in what manner the guarantee is secured. There is no profit statement and no valuation, and the purchase-price is concealed. Moreover, the demand that the full amount shall be paid-up on application is simply monstrous. We dislike the company heartily, and recommend our readers to ignore it."

THE ERASMIC COMPANY (LIMITED).—In the Chancery Division of the High Court of Justice on July 7, before Mr. Justice Byrne, Mr. Kirby applied, on behalf of Joseph Crosfield & Sons (Limited), that a proper contract to take shares in the Erasmic Company (Limited) as fully paid up might be filed pursuant to the Companies Act, 1898. The learned counsel stated that Crosfield & Sons were manufacturers of soap, and they commenced some years ago the making of a more expensive toilet-article than they had previously sold. They were successful, and it being considered detrimental to have to sell two classes of goods, they formed the Erasmic Company. Crosfield & Sons were the only shareholders of that company, and there were no creditors. Articles were prepared by the solicitors, and the draft was approved and sealed, and the shares allotted without the contract being filed. Mr. Justice Byrne considered the contract was sufficient if it had been filed, and gave leave to the company to file it.

J. LLEWELLYN & CO. (LIMITED), CHEMISTS, &C., SHANGHAI.—A meeting of the shareholders of this company was held at Shanghai on April 30. The Chairman (Mr. A. McLeod), in moving the adoption of the report, referred to the extraordinary expenses which had to be met during the past year, and which had resulted in a balance to profit-and-loss account of \$4,808 63, as against \$5,966 77 last year. The amount written off for rent and taxes showed an increase; \$737 had been written off furniture, and \$600 to close up the old Pekin account, while there had also been a considerable rise in native wages. The total expenses of working the business showed an advance of \$3,765 over the

previous year. The Pekin branch had been finally closed, as it did not pay expenses, and a fresh concern was started in that city by a native constituent with encouraging success. The same plan was adopted at the Foochow Road branch, which was destroyed by fire in 1897, and they found that treating that business as a constituent was more remunerative. The result of the working of the Tientsin branch had been about the same as in previous years, that being the only branch the company now had on its books. The sale of drugs and aerated waters at Tientsin showed an advance on previous years, and there were prospects of greater improvement. The report was unanimously adopted.

Trade Notes.

LAWRENCE'S ANNUAL.—The tourist season has brought with it once again (for the eleventh time) "The Oban Visitors' Guide," that handy compendium of local information compiled by Mr. Samnel Lawrence, chemist, Oban. The book grows in size and usefulness yearly, the new features this year being a map, further railway routes and fares, information to bathers, and a weather-table. Mr. Lawrence will be glad to supply copies of his guide to intending tourists (pharmaceutical or otherwise) in Oban and the West Highlands.

SANDRONS (LIMITED) inform us that they have decided to adopt the title "Liquor Ferri Assim. (Sandrons)" for "Sandron's Assimilable Iron Tonic." This they do on the suggestion of several leading London consultants who prescribe it. The company also inform us that the tonic is now obtainable in 12 oz. and 18-oz bottles, unstamped for dispensing, as well as in the usual stamped retail form. Both kinds can be obtained direct from Sandrons (Limited), 34 Devonshire Street, Portland Place, W., or from any of the wholesale houses.

JOHANNIS-POTASH is the new variety of Johannis water which the Apollinaris Company (Limited), 4 Stratford Place, Oxford Street, W., are bringing out. To each $\frac{1}{2}$ -pint bottle of Johannis water $7\frac{1}{2}$ gr. of bicarbonate of potassium is added, so as to produce a table-water of distinct remedial or dietetic value. The basis being a natural gaseous water, it is thought that the combination will be better appreciated than entirely artificial potash-waters; and, moreover, care is taken that the quantity of bicarbonate of potassium in each bottle is unvarying. Johannis-potash is now being brought under the notice of medical men, and will doubtless soon be asked for by chemists' customers.

A BRIGHT SHOWCARD.—Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, E.C., are offering to purchasers of their counter-adjuncts free showcards, with any wording that the chemist may choose, for advertising the goods either in the window or elsewhere in the shop. A specimen card which they send us is a hand-printed announcement regarding carbolio tooth-powder, painted in crimson and black lettering with gold relief; the card is finished by varnishing. They have several styles of the cards on exhibition in the showroom at Bartholomew Close, and they will submit samples to chemists who would like to see them. Not less than six dozen of any article for which the showcard is required must be ordered.

A NEW POISON-BOTTLE is introduced this week through the agency of Messrs. S. Maw, Son & Thompson, Evans, Lescher & Webb, Evans, Sons & Co., and J. Sanger & Sons. The makers of the bottle have produced an article quite different in style from anything else in the market. We observe from samples which are submitted to us (illustrations are, we understand, given in an advertisement in this issue) that the bottle is three-cornered in shape, but the front is substantially the same in appearance as a flat poison-bottle. On gripping it, however, the hand feels the pinnacles which are on two bevelled sides forming the back of the bottle. There are thus provided a smooth surface for labelling and ample distinction by touch, as is required by the Poisons Regulations. The bottles are made in all sizes, from $\frac{1}{2}$ oz. to 20 oz. capacity, and may be obtained in either blue or actinic-green glass. They afford another style of poison-bottle which was required as a set-off to the hexagon.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section free of charge, if properly authenticated.

THE SUSSEX DRUG COMPANY are fitting up a pharmacy at Station Road, Redhill.

BOOTS (LIMITED) have secured premises in Buxton, where a branch will shortly be opened.

MR. A. DAVY, chemist, Battersea Rise, S.W., will shortly open a pharmacy at Beckenham Road, Penge, S.E.

MR. W. H. FOWLER, pharmaceutical chemist, Station Road, Redhill, has opened a branch shop at South Merstham.

MR. E. J. LOOSMORE has purchased the business of Mr. Booth, High Street, Sutton, and intends trading as "Booth & Co."

MR. ADLER, chemist, Bermondsey, S.E., has purchased the business of Mr. A. P. Nosworthy at 30 Preston Street, Brighton.

THE CHESTER ROAD MILL at Macclesfield has been taken by a firm for the manufacture of surgical bandages and dressings.

MESSRS. HICKMAN & METCALF, chemists and druggists, Market Place, Newbury, have taken Mr. Stanley Hickman into partnership.

MESSRS. F. C. DEVON & CO., chemical brokers and dealers, have removed from 14 Fenchurch Street to 22 Fenchurch Street, E.C.

MR. E. THORNHILL, late manager to Messrs. Hall & King, chemists, Folkestone, has purchased Mr. Monk's business at Station Road, Redhill.

MR. KING, lately manager of Messrs. Parkes (Limited) Clapham Junction branch, has opened a high-class pharmacy on store principles at High Street, Sutton.

MESSRS. TAYLOR, TAYLOR & HOBSON, scientific-instrument makers, have removed their factory and office buildings to new premises known as Stoughton Street Works, Leicester.

MR. FRESHFIELD REYNOLDS, of Harrogate, has purchased through the agency of Messrs. Berdoo & Co., the business at Barton Street, Gloucester, recently carried on by Mr. E. S. Taylor.

MR. J. HINTON LAKE, of Exeter, has purchased the business of Messrs. Colebald & Co. (Limited) at Sidmouth, Devon. Messrs. Berdoo effected the transfer, and valued for both parties.

MR. H. O. WESTCOTT, who has been representing the York Glass Company in London and suburbs, is now representing Mr. Wm. Toogood, Heddon Street, Regent Street, W., on similar ground.

MR. THOMAS WRIGHT, of Bridge Street, Cambridge, has retired, and is succeeded by Mr. Horace Coulson. Messrs. Berdoo & Co. valued for the vendor, and Messrs. Evans, Sons & Co. for the purchaser.

MR. MANTON OLDFIELD, chemist, Herne Bay, has disposed of his business to Mr. Cresswell Collen, of Northcote Road, Clapham Junction, S.W. Mr. Oldfield has purchased Messrs. Felce & Co.'s business at High Street, Bromley.

PHYSICIAN (at the bar): "Come, won't you take a social glass with me?" Former Patient: "No, thank you." Physician: "What! You refuse?" Former Patient: "Yes; you see, I've been treated by doctors before."

EIGHT CAMPHOR-SEEDLINGS, which were planted out experimentally in the Mysore Government gardens two years ago, are now 3 to 3 $\frac{1}{2}$ feet high. This is considered encouraging; whether it will lead to anything practical is a different matter.

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Editorial Comments.

Assistants Wanted.

MORE candidates are being examined for the Minor pharmaceutical examination this month than have ever been taken before by the Boards of Examiners at one session. The fact is in some respects surprising—for one reason because it is a signal disproof of the common belief that the drug-trade is a failure, and another reason is that it is a fair indication that the percentage of failures will be high. The July examinations are generally heavier than the others, for the school year ends at this time, and everyone who can has a try before returning home; but there is more behind the abnormal numbers than at first appears. We have previously pointed out that the advent of professorial examiners and the two days' examination have considerably increased the proportion of failures. Thus, in 1896, 1,549 candidates were examined and 503 passed, in 1897 the can-

didates numbered 1,441 and 460 passed, and last year 1,679 candidates were examined and 535 passed. The repeats in these numbers must be very large, so that the figures do not necessarily mean a greater influx into the trade; thus, in 1890, although almost as many were added to the register (524) as in 1898, only 1,157 were examined; and in 1891 nearly 200 more were registered (681) than in 1896, although fewer (1,516) were examined than in the latter year. The present rejections are a very serious consideration, to which too little attention is given by leaders of pharmacy and the trade generally, especially as it is creating a deadlock in the supply of qualified assistants. A few years ago we pointed out that the decision of Mr. Justice Hawkins, which removed all doubt that the selling of poisons by unqualified assistants is illegal, led to a great increase in the demand for qualified assistants. The rush for qualification which followed that decision was a direct effect, because employers urged their assistants to qualify, so that in 1891 the number of candidates examined was about 50 per cent. more than the average of the few years preceding. But the increase of registered men has been comparatively small for in 1888 there were 13,812 on the register, and 1898 closed with 15,473. It is also noteworthy that the net yearly increase on the register is not greatly in excess of what obtained before Mr. Justice Hawkins's decision; thus in 1888 the increase was 63, and in 1889 it was 268, but during the past three years the net increases were 88 in 1896, 49 in 1897, and 258 last year. This is owing to the fact that the number of candidates who pass is yearly just in the neighbourhood of 500, no matter how many are examined. Meanwhile, the demand for qualified men continues to grow. We are able to show this by figures collected from the "Situations Open" in our weekly Supplement. The advertisements inserted therein may fairly be taken as reliable evidence of trade demand. The following table takes us back to the beginning of 1897, and the numbers show the advertisements of situations open inserted each month. The numbers to which asterisks are attached are those of five Saturday months, the rest comprise four Saturdays:—

—	1897	1898	1899
January	349*	469*	346
February	283	358	347
March	332	387	448
April	313	474*	576*
May	395*	396	489
June	283	395	538
July	431*	467*	
August	341	378	2,744
September	327	395	for
October	379*	571*	6 months,
November	285	342	or for
December	276	414*	1 year,
			say,
Totals	3,994	5,046	5,600

The figures also include situations in the wholesale, but this factor does not disturb the argument. The increase last year over 1897 is remarkable, even after an allowance is made for the extra Saturday which 1898 contained. If this is deducted, and added to the current year, we have a total of 4,953 situations open in 1898, and 2,837 for the six months ending June 24 last. As the heaviest months of the year have still to come, we shall not be surprised to find the total reach 6,000. It is, of course, probable that the continually growing popularity of our Supplement as an advertising medium partly accounts for the increase, but we now hear

more frequently that qualified assistants are difficult to get, although higher salaries are paid than were done ten years ago. There is a limit to this, and we fancy that, for the present condition of the trade, it has nearly been reached, and previous augmentation of salaries has not increased the number of passes, although this is the remedy for the deadlock. It is useless to expect the Pharmaceutical Society to lower the standard of the Minor, and the best we can hope for in that direction is that the examiners should keep constantly before their minds the fact that the Pharmacy Act does not require them to decide whether a candidate is a competent botanist, chemist, or pharmacognosist, but whether he is a safe man to entrust with the sale of poisons. It is such men who are particularly wanted at present. The best method of affording relief in the examination-room is not to lower the standard in individual subjects, but to divide the examination. The Society has ample power to do this, either by actual division into parts or by referring candidates back to their studies in the subjects in which they fail, as is the case in the medical examinations. The latter is the easier plan, as it could be adopted without alteration of the by-laws. Candidates, on their part, must also contribute to relieving the deadlock. There is far too strong a disposition amongst them to delay study until entering a school of pharmacy, then endeavouring in six months to assimilate knowledge sufficient for two years' patient work. Before entering the schools they should have at least an elementary knowledge of the scientific subjects of the examination and general acquaintance with the Pharmacopœia, prescription-reading, and practical pharmacy. A year's attention to these matters in private study enables them to take much greater advantage of the school instruction, and thus to increase the chance of success in the examination-rooms. We have it from teachers themselves that the lack of this preparation is the greatest evil they have to contend with, and we have no doubt that its effects are reflected by the heavy and increasing failures; but division of the examination is quite as essential as extension of private study.

Bottling Benzine.

THE Pharmaceutical Council has followed up our representations regarding the London County Council's very strict interpretation of the Petroleum Acts so far as the bottling of benzine is concerned by writing to the London County Council about it, and, in consequence, the L.C.C. has agreed to the following "instruction," which has been issued by Mr. Alfred Spencer, Chief Officer of the Public Control Department:—

PETROLEUM ACTS, 1871-1881.

The Pharmaceutical Society of Great Britain has submitted to the Council representations as to the difficulties experienced by chemists and druggists in connection with the keeping of petroleum spirit in pursuance of the provisions of these Acts, which require that such spirit should be kept under licence, except where it is kept in small quantities in securely-stopped bottles of not more than a pint. Although this exemption does not extend to bottles when opened, the Council has not insisted on a licence for small quantities of spirit used in pharmaceutical or other processes.

The Pharmaceutical Society now urges that the Council should recognise the practice of filling small bottles (such as 2-oz., 4-oz., and 8 oz.) on unlicensed premises, and consequent upon the representations of the Society, the Council has issued the following instructions, viz.:—

Persons keeping petroleum spirit in the County of London will not be required to obtain a licence, provided

(a) That the total quantity kept does not exceed 3 gals.

(b) That the spirit is kept in securely-stopped vessels, each of which contains not more than 1 pint.

(c) That not more than one of such vessels is opened upon the premises at one time, whether for use or for re-bottling for sale.

This concession would not go far enough if it were solely applicable to the Pharmaceutical Council's request. People who want to fill 2-oz., 4-oz., and 8-oz. bottles are not the most aggrieved parties, as they can buy the stuff in these packages practically as cheaply as they can put them up, and thus eliminate risk entirely. As we have previously pointed out, it is the working-class trade—the sale of benzine by the pennyworth—that the London County Council's action virtually stopped; and the Council appears to have had that in view in drafting the provisions under which petroleum spirit may be kept without a licence. Provision (c)—that not more than one pint bottle is opened upon the premises at one time, whether for use or re-bottling for sale—does not exclude the opening of the bottle and pouring a portion of the contents into a customer's bottle. That is clearly an act of re-bottling, although it is not the kind of re-bottling which the Pharmaceutical Council contemplated. We have asked Mr. Spencer if our interpretation is correct, and he replies that it is—the County Council does not desire to interfere with sales of pennyworths and the like. We would advise London chemists to follow the L.O.C. instructions strictly by keeping one bottle only for use, always having the bottle in a cool place, with the stopper secured by a cap of some kind which can be removed and replaced each time the contents are used. It is important to bear in mind that section 6 of the Petroleum Act of 1871 requires that every bottle in which petroleum spirit is sold or exposed for sale must be conspicuously labelled "Highly inflammable," with the name of the spirit (*i.e.*, Benzine) and the name and address of the seller.

The L.O.C.'s "instruction" is applicable only to London, but other local authorities may follow suit if the matter is brought under their notice when the occasion arises.

Tincture-drawback.

AFTER prolonged negotiations with the Excise authorities the committee of the Drug-trades Subsection of the Chemical Section of the London Chamber of Commerce has secured a satisfactory settlement of the tincture-drawback question. It will be remembered that several schedules or lists of preparations, including galenicals and essences, had in the course of time been formed, upon which waste-allowances and margin were indifferently applied, and it was the aim of the committee to formulate a system under which both Excise authorities and exporting houses would be able to secure the despatch of goods with the least possible delay and pecuniary loss. As a result the Excise authorities have proposed, and the committee, at a meeting on Monday at which Mr. Thomas Tyrer presided, agreed, that in future there should be no schedules, and that a uniform allowance of 3 per cent. for waste and 3 per cent. for "margin" should be granted upon all alcoholic medicinal preparations and flavouring-essences, whatsoever. This is for medicinal preparations the same in amount as before, when 4 per cent. was allowed for waste and 2 per cent. for margin; but no margin has hitherto been allowed on essences. These allowances are in addition to the duty paid upon the spirit, which is still 10s. 6d. per proof gallon. The question of liquid extracts remains in abeyance. The Excise authorities consider that these should be treated like other alcoholic medicinal preparations, but the committee contend that owing to the exceptionally great waste of spirit in the

manufacture of these extracts they should have special treatment—*i.e.*, more for waste. But it is felt that the concessions made are, on the whole, of distinct advantage to importers, and for that reason chiefly the liquid-extract matter has not been pressed. The Excise authorities also decline to make any additional allowance for waste on alcoholic preparations exported in casks, and we understand that another important question which remains open, and which is not likely to be granted—*viz.*, that spirit of chloroform should be put on the same footing as tinctures—is shelved for the moment. It is contended in some quarters that the waste-allowance should be granted in this case, but we confess to sympathy with the Excise authorities in drawing a line somewhere. There certainly cannot be any waste in preparing spirit of chloroform. The authorities have, however, given permission for the manufacture of spirit of chloroform in bulk in the presence of Excise officers; hitherto they have insisted that the preparation should be made in the bottles in which the spirit is exported. Now the new regulation will permit any manufacturer to draw, in the presence of an Excise officer, the quantity of rectified spirit necessary for diluting the chloroform, and on adding the latter, and satisfying the officer as to exportation, the necessary permit will be given for drawback.

Newcastle and Coal.

THE meeting of the Society of Chemical Industry at Newcastle this week has given great satisfaction in chemical circles in the Tyne district—one of the most important centres of the heavy-chemical trade of Great Britain. The fact is recalled that it was on the Tyne that the English alkali-industry originated late last century, and it was there that the ammonia-soda process was first carried out, although it has been chiefly owing to the unparalleled efforts of Sir John Brunner and Dr. Ludwig Mond that this method of producing alkali undermined the older-fashioned Leblanc process. The Walker Alkali-works were opened on the Tyne in 1796; and there, in 1809, Doubleday and Esterby commenced to make Glauber's salt, and a year or two later they began to make sulphuric acid at Bill Quay. Other ventures followed, and the work gradually increased until from six alkali-factories in 1830 the district contained in 1863 no fewer than eighteen, and in 1880 the maximum of twenty-five was reached. In 1863 the total amount of salt decomposed in the district was 90,000 tons, but within twenty-five years this had increased to 120,000 tons. The district has been specially noted for the production of bleaching-powder, the daily output being equal to about 100 tons, although thirty years ago less than 30 tons a day was produced in the district.

In such a centre of chemical activity the Society naturally received a warm welcome, and the visitors had a good account of themselves to lay before the annual meeting, progress in membership, in finance, in influence, and in work accomplished being reflected in the reports submitted to the members. It seems quite natural, too, that Mr. George Beilby should have addressed the members about coal—the city and the subject are akin. Moreover, as the most able worker in shale-products, Mr. Beilby can speak with authority on coal. We confess, however, to some disappointment in the result, for the sum and substance of the address may be put as "coke-briquettes and gas." Mr. Beilby has no new remedy for coal-famine. He would like to see coal burnt economically in industries by gasifying the stuff, so that the resulting gas may be used for power and heat production, by-products utilised for fertilisation of the soil and dyeing, and the coke and tar served up in tabloid

style as briquettes, the composition of which would be suited to the purposes for which they are designed. The last is the really novel part of his scheme, and if there is any good in it, we think its development should be entrusted to a company with a million pounds' capital rather than to a conference of interested parties. The latter can do little without capital, but Mr. Beilby would not have been true to his nationality had he not concluded his address with an "application." It is as inevitable in a Scotch sermon as a pinnacle to a steeple, and gives beauty rather than utility to the whole.

If Mr. Beilby imagines that disaster awaits this nation when our coal-supplies become stringent he is a pessimist. Science is equal to any emergency, as history amply demonstrates; and history also teaches that it is not until man comes to the apparent end of his resources that he really exerts himself to make the advance which generations of pessimists have tried to make and could not. Necessity is the quickest inventor.

Japanese Iodine.

OUR Yokohama correspondent has on more than one occasion referred to the tactics employed by the representative there of the Iodine Syndicate to kill the native iodine industry. This industry is not at present a big affair, but it is growing, and is practically the only menace to the powerful Syndicate which for several years has controlled the iodine market. We have this week received independent testimony of the Syndicate's operations in Japan, from a gentleman now travelling in the East, and he throws an interesting light upon the operations of the Syndicate's representative in Yokohama. We need not mention names, but may state that the representative is connected with a wealthy trading company which has, we believe, its headquarters in London and branches in China and Japan. Their representative in the latter country has entered into an agreement with two Japanese chemical traders, to whom he has given a monopoly of the sale of imported iodine and potassium iodide. In association with them the prices of these commodities have been cut below those of the native produce, but in order to recoup themselves the importing company have stipulated that all other chemicals which the two selling agents require must be purchased from the company. As previously reported by us the chemical brokers of Yokohama have endeavoured to break down the arrangement, but so far this has been unsuccessful, and as these traders are to a certain extent dependent upon the importing company for potassium iodide they find that they cannot obtain it unless they purchase certain quantities of common stock chemicals, such as antifebrin, tartaric acid, and glycerin, these being supplied at prices considerably above the current quotations. Thus the Syndicate recoup themselves for the lower prices of the iodine and iodide. In May the price of imported iodide was 2.95 yen per lb., the native iodine then selling at 3.50, but the higher prices obtained for other goods by the trading company practically bring up the price of the imported iodine to 3.70 yen per lb. Our correspondent proceeds to say:—

The Japanese manufacturers feel no embarrassment at the existence of the syndicate. They seem to be favoured with a splendid outlook, and the export of iodine is gradually increasing. It is a fact that since December last, a shipment to Germany alone amounted to over 16,000 lbs. According to statistics compiled by the Government, the native potassium iodide furnished 70 per cent. of the total internal consumption, while the imports only reached 30 per cent. This being the case, one is at a loss to see how the syndicate can reasonably expect to come out a victor in the competition in

Japan. The only end they serve by selling the iodide so cheaply is to give an inducement for the purchase of other common chemicals. It is very much to be regretted that through the selfish actions of a few parties here, the interests of native makers who joined the syndicate are being grossly and wilfully neglected, and unless something definite be done in the matter, the import of potassium iodide will soon cease to exist; and as I know that our English merchants represent the majority of interest in the syndicate above referred to, it is my earnest wish that this will reach them as quick and as widely as possible, so that they may be convinced that their rights are being trifled with.

The representatives of the Iodine Syndicate on this side have been studiously silent regarding the position in Japan, but it will be seen that it does not look so flowery for them as is the kingdom in which they are fighting the native.

THE IONONE CONTROVERSY.

The case which has been occupying the attention of one of the Judges of the Chancery Division during this week in regard to Tiemann's patent for the manufacture of ionone is exceptionally interesting on account of the fact that it is not an action by the patentee of ionone against another for infringement of his patent. The proceedings have been instituted by the other—viz., Fritzsche & Co., of Hamburg—who have obtained a British patent for an artificial oil of violets, the Comptroller granting it conditionally. The present case is the outcome of this decision by the Comptroller. Dr. Tiemann has been in court most of the time.

THE QUEST OF THE MOSQUITO.

The poor mosquito is to be warred against by doctors and Governments. The discovery that the malarial microbe is carried from man to man by the nimble insect has awakened great interest in the medical world, and it is believed to be possible that by preying upon the insect the scourge of malaria will be materially lessened. At all events, Mr. Chamberlain, the Colonial Secretary, is encouraging a research expedition to West Africa which is expected to throw important light on the new theory of malaria-propagation. The expedition is to start about the beginning of August, and will proceed direct to Sierra Leone, and there the Government authorities will give every assistance, acting upon Mr. Chamberlain's instructions.

ANALYSTS FOR IRISH GUARDIANS.

The protest of the Irish Pharmaceutical Council against the regulation of the Local Government Board that those only possessing the Fellowship of the Institute of Chemistry should be appointed analysts is timely and appropriate. The Institute, chiefly by persistent pushing, has obtained recognition for its certificate, which is not wholly merited, however. Few of the Fellows of the Institute have the ability to judge of the value of medicines, and as this work can be efficiently done by those holding the Irish pharmaceutical diploma it follows that they as a class are better qualified than F.I.C.'s for this special branch of analysis. The Irish Pharmaceutical Council has taken the best step to have this principle recognised, and we wish it success in interviewing the Board.

"HISTORY REPEATS ITSELF."

Almost two decades ago the drug-trade of the United Kingdom was shocked by a case of poisoning which happened in one of our principal cities, and which arose through cyanide of potassium being dispensed for carbonate of ammonium. The mistake was traced to an ammonium-carbonate dispensing-bottle being filled from the potassium-cyanide stock-jar, which was close to the ammon. carb. stock-jar. We now learn from the *Sydney Daily Telegraph* that Mr. Mowat, a chemist, of Mount Malcolm, W.A., has been

committed for trial for manslaughter, which happened through a precisely similar mistake. Robert Humphries, storekeeper, on his return from a visit to Sydney, took a prescription to Mr. Mowat, who dispensed it and gave Humphries a dose. The customer dropped dead in the shop in a few minutes. At the inquest Mr. Mowat admitted that he had made a mistake, giving cyanide of potassium for carbonate of ammonium, and attributed it to the fact that cyanide and carbonate were kept in similar jars.

THE VETERINARIAN AS PHYSICIAN.

In a popular comic opera a few years ago, the hero of the piece, a chronic valetudinarian, after recounting the great number of physicians he had consulted, and how they had humoured his fancies and disagreed in opinion and dosed him, was wont to bring down the house with, "But whenever I get *really* uneasy about myself I always consult a veterinary surgeon. I know he is in the habit of making up his mind what is the matter without paying any attention to what they say, and will give me just what I ought to take, whether I like it or not." This reminds the *Outlook* of a rich merchant of Bagdad who was noted for his penuriousness, and one day, feeling ill, he called in a veterinary surgeon who lived near, thinking that his fee would be less than half that of his regular physician. The veterinarian, who was a highly competent young fellow, came, recognised the case as one of biliousness, and prescribed an appropriate remedy, but in a moment of absentmindedness wrote down the dose of the drug which he was in the habit of giving to his usual patients—with appalling results. The merchant was furious, refused the fee, and no sooner was he able to go abroad than he summoned the doctor before the Courts and demanded heavy damages for his criminal carelessness. The Kadi listened to both parties; then turning to the patient said, "One question, O Hafiz: knew you this man to be a veterinarian when you called him?" "Yes, Kadi; but—" "It is enough. You have suffered, O merchant, but the consequences of your own folly, for no man falling ill would have called a horse-doctor to attend him unless he had been an ass. Your suit is dismissed, and it is an order that you pay the doctor his fee."

COMMERCIAL TRAVELLERS IN RUSSIA.

An explanatory notice of the provisions of the new regulations respecting commercial travellers and their licences has been issued by the Russian Government. The right to employ commercial travellers in Russia is confined to commercial firms which have paid the tax under Class 1, and to industrial enterprises which have paid the said tax under the first three classes. This provision applies equally to both, the tax under Class 1 amounting to 500r. in the case of commercial firms, and to 500r., 1,000r., and 1,500r. in that of industrial enterprises. Every commercial traveller must pay a personal tax of 50r. annually. Industrial enterprises which have no business of the same kind in Russia, but which carry on a wholesale trade in the Empire through their commercial travellers, are placed on the same footing as commercial enterprises, and consequently pay a tax of 500r. only. Commercial travellers who wish to provide themselves with personal licences must present for inspection either the original or a duly attested copy of the licences issued to their employers. Commercial travellers in the employment of commercial firms or of industrial enterprises which are not provided with licences according to the regulations will not be permitted to carry on business until their employers have taken out the licences in question. Commercial firms or industrial enterprises provided with licences according to the regulations may have an unlimited number of commercial travellers in their employment, but each of these travellers shall take out

annually a personal industrial licence of 50r. It will be seen from the foregoing that little encouragement is given to foreign trading in the dominion of the Tsar. The firm must pay a tax for being allowed to allow their travellers to pay another tax to find business.

CORONERS AS JUDGES.

It is time that some notice should be taken by the authorities of the liberal manner in which some Coroners take advantage of their position to comment upon the conduct of those who are so unfortunate as to be called before them. Here is a case in point:—

An inquest was held at Fulham on July 11 concerning the death of Edward Billing, aged 6 months. The mother said the child had been delicate and had been in the infirmary. She went to a chemist and told him the baby had diarrhoea and sickness, and he supplied her with a bottle of medicine, for which she paid 6d. The child died the next day. In reply to the Coroner, the mother said she waited to see the effects of the medicine before she sent for a doctor. If the chemist had refused to supply her she would have gone to a doctor at once. The chemist asked what was the matter with the child, and said if it was no better the next morning she had better call in a medical man. Dr. Arundel attributed the death to asphyxia from tuberculosis, accelerated by diarrhoea and sickness. Alfred William Barker, chemist, Wandsworth Bridge Road, said he gave a simple mixture which did not include an opiate. He was given to understand that the woman's doctor lived a long distance off, but he told her she must call him in if the child was no better. The Coroner said the chemist had contravened the Apothecaries Act by prescribing. It had done no harm in that case, but still he was not supposed to prescribe. He (the Coroner) recognised the awkward position in which the chemist was placed, and that if he did not supply it another person would. It was not the medicine so much as the delay caused in not calling in a doctor.

Mr. Barker said he had no idea the child was so ill.

The Coroner: That is exactly the point. You had no idea as to what was really the matter with the baby, but still you supply medicine for it when a doctor should be called in. You know it is illegal?

Mr. Barker: Yes, but it is very difficult.

The Coroner: Yes, I recognise that.

A verdict in accordance with the medical evidence was returned.

Here the Coroner was wrong, if the evidence is correctly reported to us, and we have no reason to believe that it is otherwise. The chemist did not violate the Apothecaries Act because he did not diagnose disease and supply a remedy for it: all he did was to sell a medicine which was asked for. That is not a reprehensible action, and the probability is that a medical practitioner would have given a similar medicine with the same result, in which case the Coroner would not have been called in.

New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

Heitzmann, L. *Urinary Analysis and Diagnosis by Microscopical and Chemical Exam.* 8vo. 10s. 6d. net. (Baillière.)

Jude, R. H. *Physics, Experimental and Theoretical*, partly from the French of H. Gossin. Illus. Vol. 1. Part 1: Mechanics, &c. 3s. 6d. net. Part 2: Heat. 7s. 6d. net. Part 3: Acoustics. 2s. 6d. net. 3 parts. 9½ × 5½. Pp. 950. 12s. 6d. net. (Chapman.)

Lockwood, C. B. *Aseptic Surgery.* 2nd ed. 7½ × 4½. Pp. 280. 4s. (Pentland.)

Walker, Norman, M.D. *An Introduction to Dermatology.* 8½ × 5½. Pp. xvi. + 247 and coloured illustrations. 8s. 6d. net. (Wright, Bristol, and Simpkin, London.)

Treatment of Sprains in Horses.

By ROWLAND G. SAUNDERS, M.R.C.V.S.

THE time-worn practice of treating sprains by the application of embrocations and liniments, ranging from soap liniment to vesicating-embrocations, was founded on a wrong appreciation of the pathological condition spoken of as sprain; consequently this treatment often yielded unsatisfactory results. The structures of the animal body most liable to sprain are muscles, tendons, and ligaments. The horse usually injures the two latter structures. Tendons are the inert cords which attach muscles to bones, while ligaments are the fibrous bands which bind the ends of two or more bones together to form a joint. Both are composed of fibres running in the direction of their long axis, and the reason they are so often sprained is that they are not appreciably elastic, so that when a wrench occurs portions of them give way instead of yielding. In the lesion which a sprain produces in either of the structures we find that there is more or less actual tearing of the fibres, while other fibres are excessively stretched. One of the first symptoms of sprain is the occurrence of swelling of the injured region; this is in part due to rupture of some of the small bloodvessels at the seat of injury, which pour out their contents into the tissues, and partly to the inflammation (that process by which nature repairs injuries) which is set up causing an increased flow of blood to the part and a leaking out from the walls of the intact vessels of some of the liquid portions of the blood, this fluid representing reparative material and being known as lymph. The tension caused by the extravasated blood and lymph, if not relieved by treatment, soon causes the fibres to soften, until in time they are metamorphosed into a gelatinous mass, and this in turn into a fibrous tissue which lacks the strength and compactness of the original tendon or ligament. It will therefore be patent to the most ardent upholder of the orthodox treatment that stimulating applications can only increase the inflammation—what is needed is to decrease, not increase, the tension. The best treatment to adopt is well illustrated in the case of a mare which severely sprained the back tendons of one of her fore limbs; so great was the injury and consequent pain that she could hardly place any weight on the limb for days. The limb was bathed with hot water for ten minutes, the effect of this being to check the excessive flow of blood, and, consequently, to retard the effusion of blood and lymph into the tissues. The limb was then dried, hand rubbed for ten minutes with a little weak belladonna ointment, and then enveloped from the knee to the hoof in $\frac{1}{2}$ lb. of cotton wool, distributed as evenly as possible round the limb. Over this was wrapped a 6-yard cotton bandage 3 inches wide. Next day the bandage was removed, and the treatment repeated. This was done every day for a fortnight (except the bathing, which was only kept up for a few days), and when discontinued the mare went quite soundly after the stiffness caused by the tight bandaging had worn off.—*Colonia*.

[Further sound advice in regard to after-treatment will be found in "Veterinary Counter-practice," page 124.]

Superfluous Hairs.

THE LIMIT OF ELECTROLYTIC DEPILATION.

IT is a common error to suppose that the electrolytic method of removing superfluous hairs is universally applicable, and young ladies whom Nature has endowed with a delicate dark fur on the upper lip want to try it. Mr. Balmanno Squire, F.R.C.S., has in the *Lancet* given pithy advice for such a case, and he shows so admirably the limitations of the electrolytic method and its consequences that we cannot do better than give his own words:—

The case is that of a young woman, aged 26 years, who is developing a moustache of a dark colour which 'is now about one-eighth of an inch long,' and the question is raised whether the destruction in detail of the roots of these hairs by the electrolysis needle would conduce on the whole to her benefit. I should be disposed to say that it certainly would

not do so. I never employ electrolysis in a case of that kind, and always endeavour to persuade the patient not to think of having it done. My reasons are these: In juvenile feminine hirsuteness the hairs on the upper lip are, as a rule, fine—that is to say, silky, are short, and are thickly sprinkled—that is to say, are extremely numerous on a comparatively small area. Each introduction of the electrolysis needle produces always a minute scar. When the hairs are so closely placed together as they are in cases of this kind and are thus operated on, the minute scars overlap one another and thus considerable disfigurement is unavoidable. I have seen many cases where electrolysis has been performed, evidently with due care, for the destruction of the moustache in young women, with a rather deplorable result—that is to say, the production of an uneven, even a bridled, scar occupying the greater part of the upper lip and constituting a noticeable disfigurement of a somewhat forbidding character. It is a question of taste. For my own part I prefer the moustache. But, what is more to the point, I have always found that the patient herself has greatly regretted the event, and would, if she could, exchange the scar for the moustache. It is otherwise with senile feminine hirsuteness. There the hairs of the moustache are long, are coarse, and are spaced much more widely apart. In such cases treatment by the electrolysis needle is suitable, and is capable of producing results of a satisfactory kind. But even in cases of this kind the less practice the operator may have had in performing the operation the worse will be the result which awaits him. What, then, is the best thing for the patient to do? Something that she will in all probability firmly refuse to do. She ought to shave, and to shave habitually. What is the thing which she is likely to do? She will most probably pull every one of the hairs out over and over again; in this respect following the example of her ancient Roman, her ancient Grecian, nay, even her ancient Egyptian, sisters. Why will she refuse to shave? Because she thinks that such a course will make the hair grow more thickly, coarser, and longer. Is this so? Not at all. I have satisfied myself, by repeated and careful experiment, that it is not so. What will be the result of her pulling the hairs out over and over again? It will make them grow much more thickly, much coarser, and very much longer.

The Day before the Major.

I've suffered many sleepless nights
In mystic mazes wand'ring,
And e'en neglected toilet rites
O'er knotty problems pond'ring;
But on no day my weary soul,
Though ever growing sager,
So heavy felt the moments roll
As the day before the Major.

No single hour last night I slept,
But tossed upon my pillow;
And since the daybreak I have wept
Enough to make a billow!
Yet worldlings tell me "I shall do,"
And back me with a wager:
They little know what I've "gone through"
On the day before the Major!

The twilight falls; a farewell cram,
The last before the ordeal;
And then at supper-time a dram
Of some reviving cordial:
I must my ebbing courage screw
Up to the sticking stage—ah!
Thank goodness this long day is through,
The day before the Major.

SYRUPUS.

THE CORROSION OF SEA-SHELLS in museums has been found by Mr. J. Cosmo Melvill to be due to the action of butyric acid (a residue from the mollusc) on the calcium carbonate of the shell, calcium butyrate being formed.—*Journ. Conch.* (April, 1889).

Legal Reports.

Saccharin Corporation v. The Anglo-Continental Works (Limited).

IN the Chancery Division of the High Court of Justice on Friday, July 7, before Mr. Justice Byrne, Mr. A. J. Walter moved to discharge an order joining Robert Reitmeyer as defendant to the action on the ground that it was a hardship to proceed against him as a director of the defendant company, because a separate action was also pending against him by the plaintiff company. The motion was opposed by Mr. Graham, on behalf of the plaintiff company, on the ground that the infringements relied on were separate and distinct. He added that the Anglo-Continental Company did not come into existence until long after the writ in the other action was issued. Mr. Justice Byrne dismissed the motion, giving the plaintiffs the costs in any event.

Merchandise-marks Act.

SCOTCH INNOCENCE.

AT Paisley Sheriff Court, on July 8, before Sheriff Henderson and a jury, James Welsh, aerated-water manufacturer, Beith, pleaded not guilty to five charges brought at the instance of Messrs G. & C. Moore, aerated-water manufacturers, Glasgow, of having sold bottles of aerated waters, to each of which their trade-mark was falsely applied. The evidence showed that Messrs. Moore's bottles were embossed with their name and trade-mark, and that respondent had attached to them his own labels, contending that this was the usage of the trade. Sheriff Henderson, in his address to the jury, said the point had been decided in the case of Burns v. Turner before the High Court of Justiciary, which Court held that this was an infringement of the Act. The Sheriff apparently did not share this view, and the jury found that respondent had only acted in accordance with the usages of the trade, and was not guilty of a criminal offence.

IRISH GUILT.

AT the Armagh Petty Sessions, on July 6, Francis Connolly was charged by the Inspector of the Belfast Bottle Exchange (Limited) with selling aerated waters in bottles bearing a false trade description. There were thirteen summonses in all. Complainant deposed that on May 13 last he purchased thirteen bottles of aerated waters, on each of which was the label of the Armagh Mineral-water Company, but with the names of other firms embossed on the bottles. Defendant stated that he purchased the goods from the Armagh Mineral-water Company. He was fined 13s. and costs.

The Pharmacy Act.

UNLABELLED LAUDANUM.

AT Leigh Police Court on July 5, William Warden, a grocer and patent-medicine vendor, was fined 2*l.* and costs for selling laudanum without a label. The police prosecuted, and the circumstances of the case were reported in our issue of June 24, page 984.

Sale of Food and Drugs Act.

CAMPHORATED OIL.

AT Durham, on July 5, Messrs. John Bell & Sons (Limited), wholesale druggists and dyers, Liverpool, were charged with giving a false warranty for camphorated oil. A sample of the oil supplied by defendants, and for which a written guarantee of genuineness had been given, was purchased by an inspector from a small shopkeeper at Langley Moor, near Durham. The analysis showed that the oil was made with rape or mineral oil instead of olive oil. Technical objections were raised for the defence that since the oil was purchased the firm had been converted into a limited company, and also that the analysis was obtained after the summons was taken

out. The defendants' warehouseman was also called to prove that the defendants had used in the preparation an oil which was invoiced to them as olive oil, but defendants were fined 20*l.* and costs.

AT Epsom, on July 5, a general dealer named Mellor was fined 2*s.* 6*d.* for selling camphorated oil which was certified by Dr. Stevenson, public analyst, to contain only 16 per cent. of camphor. The defence in this case was that a mistake had occurred on the part of the wholesale firm—Messrs. Pearce, Duff & Co. Defendant ordered from an old list. The firm, after receiving the order, wrote that they were no longer supplying that quality of oil, as they now only supplied camphorated oil in accordance with the formula of the British Pharmacopœia, whereupon the defendant wrote and ordered this oil, as suggested by the firm themselves, and therefore there was no dishonesty on the part of the defendant.

VINEGAR.

THE Marlborough Police Court Magistrate has had two cases of vinegar-adulteration before him; in one (50 per cent. dilution) a fine of 3*l.* and costs was imposed. In the other Dr. Edmunds, the public analyst, certified that the vinegar contained sulphuric acid—an unnecessary addition. Mr. B. E. R. Newlands and Mr. Leo Taylor, public analyst for Hackney, maintained that there was no free sulphuric acid in the sample, and the Magistrate adjourned the case for six weeks until Somerset House decides this very simple question in dispute.

County Court Cases.

A CASE THAT FAILED.

AT Brigg County Court on July 7, an application for a new trial was made on behalf of Nathaniel Boon, chemist, Kirtlington-Lindsey, who at the last court was sued by Thomas Fox Garbutt, of the same place, for 5*l.* damages, sustained owing to defendant supplying to plaintiff's wife, it was alleged, wrong medicine. The application was refused.

DISINFECTANTS.

IN the City of London Court on Friday, before Mr. Commissioner Kerr, an action was brought by Jeyes' Sanitary Compounds Company (Limited), 64 Cannon Street, E.C., to recover the sum of 2*l.* 14*s.* 6*d.* for disinfectants supplied to the defendant, Mr. Thomas H. Goodwin, trading as W. Ashbourne, 85 Kingston Road, Wimbeldon. The defence was that the defendant had never traded as W. Ashbourne, and that the disinfectants were supplied to someone else. For the plaintiffs it was said that the defence amounted to a swindle. This was indignantly denied, and the case was referred to the Assistant Registrar as a matter of account.

The Ionone Patent.

THE VALIDITY OF TIEMANN'S PATENT No. 8,736, 1893, IS QUESTIONED.

MR. JUSTICE COZENS HARDY, sitting in the Chancery Division of the High Court on July 6, heard the opening of this action, in which Mr. Moulton, Q.C., Mr. Astbury, Q.C., and Mr. Colefax appeared for the petitioners, and Mr. Cripps, Q.C., Mr. T. Terrell, Q.C., and Mr. A. J. Walter for the respondents. Messrs. J. H. & J. G. Johnson instructed counsel for the petitioners, and Messrs. Faithful & Owen were the solicitors for the respondents. The petitioners are Messrs. Franz Fritzsche & Co., manufacturing chemists, of Hamburg, and the respondent is Ferdinand Johann Carl Wilhelm Tiemann, of the firm of Haarmann & Reimer, residing at 18 Beudlerstrasse, Berlin.

Mr. Cripps, in opening the case, said that proceedings were taken under Section 36 of the Patents, Designs, and Trade-marks Act of 1883 for the revocation of a patent. His clients were the assignees of the patent of Dr. Tiemann, and the petitioners were seeking to have the patent revoked, on the ground of insufficiency of description. The issue for the Court was whether the patent was a good patent or not.

The patent had already been the subject of litigation in Belgium, France, and Germany, and in every case the decision was in favour of the patent.

Mr. Moulton dissented.

Mr. Cripps went on to say that it was a most valuable patent in connection with perfumery, and it was its extreme value that had brought about the proceedings. He did not think they would hear anything on the question of utility. It was alleged that the patentee did not make a full disclosure to the public of the information possessed by him at the date of the specification relative to the carrying out of his invention; but he (Mr. Cripps) was instructed that was not the case. The learned counsel then proceeded to deal with the specification, prefacing his remarks by saying that there was no question as between the complete and the provisional. The invention, he said, was "ionone," which was used for producing the violet perfume. The learned counsel contended that the process of manufacture was simple, and adequately described in the specification.

At this juncture the hearing of the case was adjourned.

The case has since been proceeding day by day. The first witness called on behalf of Dr. Tiemann's party was Professor James Dewar, who said he had examined Dr. Tiemann's specification, and worked the process for producing pseudo-ionone and ionone. He had not had the slightest difficulty in following the description in the specification. Witness was then taken through the specification, with a view of showing that the description was sufficient, and he stated in the course of his examination that ionone was an entirely new departure in organic chemistry, and an extremely valuable product. In cross-examination by Mr. Moulton, Professor Dewar said the patent, as he understood it, was for the production of a substance suitable for perfumery. The ionone was the smelling-body which the patentee desired to produce. He had carried out the process in association with Dr. Liebmann, and Mr. Moulton severely cross-examined him as to the details of the experiments.

In the course of this cross-examination Mr. Moulton said that one of his objections to the patent was that no sufficient directions were given for the purification. He held that the patent did not describe ionone—ionone being the result of purification—because there was no such thing as impure ionone. The ionone claimed by the patentee was a definite chemical product, and he was going to say there were no sufficient directions given for leading up to that.

Dr. Adolph Liebmann, the next witness, said he had had a great deal of experience in organic chemistry, and found no difficulty in producing ionone by following the directions in the specification. With regard to the first objection, "In not giving the necessary conditions of the condensation process by which pseudo-ionone is formed," he said condensation by the elimination of an atom of water between ketones and alkalies was a well-known and well-described reaction at the date of the patent, and he had found nothing ambiguous in the description of the condensation given by Tiemann. He had done it successfully. As to the next objection, "In not giving any directions as to the proportions, temperature, or strength of solution of the alkaline agent to be employed in such condensation process," he said it was well known at the date of the patent what addition of alkali was required for condensation.

The further examination and cross-examination were highly technical in character.

Mr. Moulton, Q.C., having opened the case for the petitioners, called

Dr. F. W. Passmore, of Helbing & Passmore, who said he had worked or attempted to work Dr. Tiemann's process through, both in the laboratory and in works on a large practical scale. He had honestly and fairly tried to produce both pseudo-ionone and ionone by the process described in the specification, and had not been able to do so. His experiments were made at Hamburg, and he then gave details of them.

In cross-examination by Mr. Cripps, Dr. Passmore said that in carrying out his experiments he took what he considered was a fair quantity of lime. There were no data given in the specification, and he could not give exactly the proportion of lime to water which he took; but he thought it was at least two volumes of lime and water to one of citral.

Dr. A. Ziegler, giving his evidence through an interpreter,

said that he was the practical works chemist at the works of Messrs. Fritzsche, the petitioners. He was the inventor of the process described in what had been called Messrs. Fritzsche's patent. Being desirous of seeing how Tiemann's patent would work, he made a number of experiments at Hamburg with alkaline earths and alkali metals in accordance with Tiemann's specification. He found that he could do nothing under the patent: he could not make any ionone. Witness was cross-examined by Mr. Terrell, with a view of showing that his experiments did not fairly represent what was pointed out in the specification.

At the further hearing on July 13 Dr. Passmore was recalled, and gave the Court the results of further experiments he had made.

Dr. Aeneas E. H. L. Ostermann, a partner in the petitioner's firm, said that no definite decisions had been given against his firm in proceedings where the validity of Tiemann's patent had been raised. Witness had made certain experiments at Hamburg, the result of which he gave to the Court. In cross-examination he said his firm had had litigation in Germany and France in connection with this patent.

On the suggestion of his Lordship questions as to these actions were not pressed, his Lordship saying that on the evidence before him he had to come to the best conclusion he could.

Mr. Horatio Ballantyne, F.I.C., F.C.S., also gave evidence. The case is still proceeding.

Bankruptcies and Failures.

Re ALLEN PERCY NOSWORTHY, 3 St. Leonards Terrace, Hove, Chemist.

In this recent failure the liabilities amount to 1,529*l.* 11*s.* 9*d.* and the assets 171*l.* 16*s.* 11*d.*, and the following are the creditors:—

	£	s.	d.
Barron, Harveys & Co., London...	...	13	7 8
Bristow & Co., London ...	...	12	17 2
Butcher & Sons, London ...	...	10	3 0
Crosfield & Co., Warrington ...	...	10	0 0
Edwards, Tunbridge Wells ...	...	12	7 5
Fry & Co., Brighton ...	...	70	0 0
Gibbs, D. & W., London ...	...	11	7 6
Hearon, Squire & Francis, London ...	...	47	0 0
Hovenden & Sons, London ...	...	17	16 1
Jay, Alford & Son, London ...	...	18	12 0
Kent & Sons, London ...	...	10	0 0
Marshall's (Limited), London ...	...	13	2 1
Maw, Son & Thompson, London ...	...	23	0 0
Meggesson & Co., London ...	...	27	0 0
Nash, W. E., Brighton ...	...	52	7 9
Parish, B., Brighton ...	...	1,000	0 0
Potter & Clark, London ...	...	11	5 0
Schutze & Co., London ...	...	10	0 0
Schweppes (Limited), London ...	...	13	0 0
Sperperoy & Co., London ...	...	11	9 2
Townsend & Son, Exeter ...	...	11	12 3
Ward & Co., Brighton ...	...	10	10 0
Wilkinson, Manchester ...	...	12	0 0
Wimprey & Co., London ...	...	10	0 0

Re JOHN ARTHUR REID, 37 Walbrook, E.C., Merchant in Chemicals and Brown Wood-pulp.

THE first meeting of the creditors of this debtor was held on Wednesday at the London Bankruptcy Court. Accounts were submitted showing total liabilities 6,906*l.* 11*s.* 6*d.* (unsecured 6,741*l.* 18*s.* 2*d.*), and assets expected to produce 95*l.* 5*s.* 2*d.* after allowing 30*l.* for the preferential claims. Amongst the unsecured creditors are:—Chemische Fabrike, Hamburg, 1,183*l.* 9*s.* 10*d.*; Edwards, P. A., Brondesbury, 100*l.*; Gessner-Low's, Raschan, Germany, 111*l.*; Herder, V., Wernsdorf Pockan Lengelfelde, Germany, 250*l.*; Meller, J., Julich, Germany, 301*l.* 2*s.* 6*d.*; Reid, Mrs., Brondesbury, 1,757*l.* 8*s.* 3*d.*; and Relph, M. & Co., London, 869*l.* 1*s.* 10*d.*

Gazette.

PARTNERSHIPS DISSOLVED.

Ekins, A. E., and Fisher, E. H., under the style of Ekins & Fisher, St. Albans, pharmaceutical chemist, &c.

Gully, E. J., and Macadam, C. O., under the style of Williams's Isinglass Company, White's Row, Whitechapel, E., isinglass manufacturers.

Jennens, A. R., Jennens, R. W., and Wilkins, W. H., under the style of Jennens Brothers & Co., Birmingham, glass-bottle manufacturers and druggists' sundrymen.

Lihme, A. P., and Lihme, A. E., under the style of A. G. Lihme & Co., formerly Mining Lane, E.O., and subsequently Mark Lane, E.O., merchants.

Taylor, F. H., and Quaintance, A. W., under the style of F. H. Taylor & Co., Errol Street, St. Luke's, Old Street, E.O., medical glass gradators, &c.

White, M. S., and Dickens-Lewis, C. D., under the style of Malcolm White & Co., Liverpool, wholesale drysalters, &c.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATION.

Wilson, David Milligan, Upper Edmonton, Middlesex, physician and surgeon.

ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

Eddowes, Walter Dowley, jun., Stamford, surgeon—discharge suspended for two years, ending June 6, 1901.

Harvey, George Henry, High Street, Peckham, S.E., late West Mersea, Essex, bachelor of medicine—discharge suspended for two years, ending June 1, 1901.

Lake, William Henry (trading as the Ammonia Soft-soap Company), Leicester, grocer and soft-soap manufacturer—discharge granted conditionally.

IRISH FAILURE.

Sweeney, John B., Church Street, Ballymena, Antrim, druggist.

Wills of Deceased Chemists.

ARNOLD.—The will of Mr. James Arnold, chemist and druggist, 2 King's Road, Southsea, who died on January 8, 1899, has been proved in London by Mrs. Arnold, the widow, and Mr. Charles Arnold, 54 Elizabeth Street, Pimlico, the brother of the testator, whose gross estate is sworn at 5,265*l.* 10*s.*; the net personalty is entered "nil."

DAVIS.—The will of Dr. P. H. Davis, analytical chemist and tobacco specialist, East Hill, Wandsworth, who was one of the passengers on the *Stella* that were drowned, has been proved by Dr. H. Watts and Mr. W. H. George and Mr. Frank Woodbridge, the executors. The estate is sworn at 2,819*l.* 15*s.*, and the net 2,444*l.* 3*s.* 5*d.*

DRAWBRIDGE.—The will of the late Mr. J. G. Drawbridge chemist and druggist, 1 Upper Hill Street, Liverpool, has been proved by Mr. John H. Drawbridge, the executor of the testator, whose estate is sworn at 851*l.* 2*s.* 3*d.*

HURST.—The late Mr. James Hurst, chemist and druggist, 4 Greenacres Road, Oldham, having died intestate, letters of administration to his estate have been granted at Manchester to Mrs. Sarah Ann Hurst, the widow, by whom the deceased's personalty was sworn at 1,272*l.* 9*s.* 5*d.*

JONES.—The will of Mr. E. H. Jones, chemist and druggist, 30 St. Augustine's Parade and 19 Great George Street, Park Street, Bristol, who died on November 21, 1898, has been proved by Mrs. T. J. Jones, widow and sole executrix of the testator, whose estate is sworn at 2,167*l.* 0*s.* 4*d.*, of which 1,579*l.* 3*s.* 6*d.* is net personalty.

WARD.—The will, with two codicils, of Mr. David Ward, chemist and druggist, Chipping Ongar, who died on November 29, 1898, has been proved by Mrs. Ward, the widow, and Mr. W. McLaren Fleming, 21 West Nile Street, Glasgow. The testator's estate was sworn at 3,487*l.* 17*s.* 2*d.*, of which 2,630*l.* 5*s.* is net personalty.

Deaths.

BAMFORD.—At Rochdale, on July 4, Mr. Hermann Bamford. Aged 31. Mr. Bamford was the youngest son of the late Councillor Bamford, and was associated with his brother, Mr. William Bamford, chemist and druggist, in the business which they carried on in Rochdale under the title of "The Executors of the late J. W. Bamford." He had been actively identified with the Rochdale and District Photographic Society from its inception, and for several years acted as Secretary. He leaves a widow and one child.

DONALDSON.—At Edinburgh, on July 7, Mr. William Donaldson, chemist and druggist, Brora, Rogart, and Golspie.

GARFORTH.—On June 27, Mr. John Garforth, chemist and druggist, Sheffield. Aged 66.

GARRY.—At the residence of her son, Mr. Christopher Garry, M.P.S.I., Greville Street, Mullingar, Mrs. Maria Garry, widow of the late Mr. James Garry, chemist. Aged 67.

GODDARD.—On June 25, Mr. Enoch William Goddard, chemist and druggist, Nottingham. Aged 45.

HARRISON.—At Southport, on July 11, Alderman James Harrison, chemist and druggist, St. Helens. Aged 87. Mr. Harrison commenced his career at Lancaster, and went to St. Helen's as an assistant to the late Dr. Garton. Sixty years ago he started a pharmacy in St. Helen's, which he conducted until a few years ago. Alderman Harrison was for some years a member of the Board of Commissioners. He was elected a member of the Town Council on the formation of the Council, shortly after the charter of incorporation was granted, in 1868, and was made an alderman in 1874. The deceased alderman occupied the mayoral chair in 1880. He was re-elected an alderman last November for a further term of five years. He was a member of the Borough Bench, and for several years attended so regularly every day to the duties of the position that he became known to the Court officials as "the Stipendiary."

MOON.—On June 17, Mr. Henry Moon, chemist and druggist, Brighton. Aged 50.

SWIFT.—*The Chemist and Druggist of Australasia* reports the death, on May 12, of Mr. George Swift, a leading pharmacist of Melbourne and a former member of the Pharmacy Board of Victoria. Mr. Swift was born in England, and after serving his apprenticeship became an assistant to Messrs. Allen & Hanburys. In 1864 he went out to Victoria, but stayed only four years, returning to England and entering his brother's office, with a view of becoming a solicitor. Tiring of that, in 1871 he returned to Melbourne, and again entered the employment of Messrs. H. Francis & Co. In 1873 he became a partner in the business, his partnership continuing till 1879, when he retired, having purchased a pharmacy at Sale, in Gippsland. This business he carried on for some time, then returning to Melbourne he acquired the business in Swanston Street of Wm. Ford & Co. In 1894 he was obliged through reverses to surrender his estate, but a few months later opened a shop in Collins Street. Mr. Swift was from 1887 to the end of 1898 a member of the Pharmacy Board of Victoria. He also for some time held a seat on the Pharmaceutical Council.



TOMLINSON.—On July 12, at 2 Lower Seymour Street, Portman Square, W., Marianna, the wife of Thomas Tomlinson, aged 64.

WATTS.—On June 26, Mr. Walter Watts, chemist and druggist, Lower Clapton.

Medical Gleanings.

RANCIDITY IN FATS.

To determine the presence of rancidity as opposed to acidity in fats, Mr. A. Schmid (*L'Union Pharmaceutique*) recommends the addition of 5 c.c. of a freshly-prepared 1-per-cent. solution of hydrochlorate of metaphenylenediamine to a mixture of 20 gr. of fat and 100 c.c. of water. If these are distilled together in a current of vapour a brown coloration will be produced.

EXCESSIVE SWEATING OF THE HANDS.

The *Riforma Medica* gives this formula:—

Boric acid	5 parts
Borax	15 "
Salicylic acid	15 "
Glycerin	60 "
Dilute alcohol	60 "

Mix. To be rubbed on three times a day.

BRONCHORRHEA.

Benzoic acid	60 gr.
Tannin	30 gr.

Divide into twelve powders.

Give one powder four times daily.

—Maragliano, *Merck's Archives*.

IODINE IN INFANTILE GASTRO-ENTERITIS.

BIZINE reports particularly favourable results from the use of this mixture:—

Emulsion of castor oil	6 oz.
Oil of peppermint	3 drops
Oil of cloves	5 drops
Tincture of iodine	10 drops
Chloroform	2 drops

Mix.

A teaspoonful every hour.

The mixture should be kept on ice, to prevent decomposition. One bottle is usually enough, but if after that has been taken there is still a little diarrhoea, 10 gr. of iodised starch may be divided into six doses, one to be taken twice a day.—*New York Medical Journal*.

BRONCHITIS CAPSULES.

DR. G. F. BUTLER, in the *Medical Standard*, recommends the following in chronic bronchitis. He says that in the majority of cases the derivatives of tar, turpentine, and balsams are the most efficient expectorants. They are specially indicated in relaxed conditions of the mucous membranes, with excessive secretion, in combination as follows:—

Olei terebinthinae	mxx.
Picis liquidæ	mxx.
Olei eucalypti	ml.
Balsami Tolutani	3iiss.
Benzosol.	3iv.

M. et disp. in caps. No. lx.

Sig.: One four or five times a day.

MEDICINAL USES OF HYDROGEN PEROXIDE.

ALTHOUGH peroxide of hydrogen was much used by the late Sir B. W. Richardson, it is not so much employed now in England as an antiseptic and disinfectant as it is on the Continent. Kingzett and others have proved its value in these respects. It is almost as powerful as mercuric chloride, and classed amongst the first group of antiseptics, iodoform being in the second group, and salicylic acid, thymol, phenol, permanganate of potash are in the third, while boric acid is classed in the fourth. Hydrogen peroxide has the advantage over iodoform, phenol, &c., of being odourless. Dr. Vacher states that for many years he has treated eye cases with this remedy—viz., ulcerative blepharitis, purulent conjunctivitis, and granular conjunctivitis. In most cases irrigation under the eyelids completely restores the eyes to a healthy condition. It is also useful in psoriasis and vomiting, the dose being a dessertspoonful of 10-vol. peroxide in 1 pint of water taken in sips throughout the day.

SIAMESE REMEDIES.

ACCORDING to the *Gazette Médicale de Paris*, the skin and horn of the rhinoceros, the claws, teeth, brain and bile of the tiger, and the young antlers of the stag are highly esteemed in Siam as articles of materia medica.

iodo-saccharised COD-LIVER OIL.

E. REBOUL finds that saccharin is good for covering the taste of iodised cod-liver oil. The difficulty is the imperfect solubility of saccharin in oil; but by dissolving it in ether that is got over. The procedure is as follows:—Dissolve 1 gramme of saccharin in 187 c.c. of ether and add to 1 litre of iodised cod-liver oil, contained in a flask, and weigh. Heat the mixture in a water-bath until 136 grammes weight is lost—that is, the weight of the ether employed. The ether may be recovered if desired. The resulting oil is limpid, dark-yellow in colour, and of decidedly sweet and pleasant taste.—*Bull. Phar. Sud-Est*.

IPPECACUANHA IN EPILEPSY.

MR. C. KNOX BOND, L.R.C.P., writing to the *Lancet* about a case of epilepsy (an unmarried woman aged 29) in which potassium bromide in large doses had been administered, states that, under the advice of Dr. Alfred Eddowes, the bromide was reduced to a third of the former dose, and vin. ipecac. added. The ipecac. was increased from time to time as the fits recurred until a dose of 40 minims three times a day was reached. With each increase of ipecacuanha there was a marked improvement in the patient's condition, the severity and frequency of the fits diminishing. The rationale of the ipecac. is that it checks the voracious appetite and neglect of mastication so frequently observed in epileptics.

PRESCRIBING EXALGIN.

In the *Journal de Pharmacie et de Chimie* M. Schull draws attention to the after effects of dosage with exalgin. One case, in which 0.50 gramme of exalgin was prescribed, was followed by a deep rash which lasted for six hours. Four days later another dose of 0.25 gramme provoked the same symptoms of intolerance. M. Schull is of opinion that exalgin ought, for dispensing purposes, to be associated with other medicines, and better results are obtained by employing the following formula:—

Analgesic Mixture.

Exalgin	0.10 gramme
Phenacetin	0.25 gramme
Antipyrin	0.40 gramme

For one cachet. Two daily.

Antithermic Mixture.

Exalgin	0.10 gramme
Phenacetin	0.25 gramme
Sulphate of quinine	0.25 gramme

For one cachet. Two daily.

BUXTON THERMAL WATER.

At a recent meeting of the Medical Society of London, Dr. W. Armstrong, of Buxton, read a paper on the effect of nitrogen gas in the secretion of urea and uric acid. Nitrogen is generally considered to be inert, so that it is surprising to learn that it appears to be the active constituent of the Buxton thermal water. Dr. Armstrong has made a long series of observations with the view to determining their effect, both when the water is drunk and when it is used for bathing. In both cases the kidney-secretion is increased, and the amounts of urea and uric acid excreted also increased. But the increase is greatest when the water is used for bathing, although, as might be expected, the kidney-secretion is greater when the water is drunk. He attributes the increase to the action of the nitrogen by absorption through the skin. Dr. Armstrong stated that there is a diminution in the quantity of uric acid in the urine before an attack of gout; and Dr. Luff was prepared to think that nitrogen, as it occurs in Buxton water, has some remarkable action in increasing the amount of uric acid excreted. It would, we think, make the argument complete if some experiments were made with artificial water impregnated with nitrogen.

Correspondence.

In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

Homœopathic Cutting.

SIR,—The points in Messrs. Ashton & Parsons's last letter are certainly conspicuous by their absence, and, as it neither contains any answer to ours or your other correspondents', once more we most emphatically deny being the originators of these irrelevant and under-cost prices, in support of which we give a few of Messrs. Ashton & Parsons's quotations which we have before us, viz :—In July, 1895, 5s., less 40 per cent., 3s.; August, 1895, 5s., less 45 per cent., 2s. 9d.; November, 1896, 1s. 9d.; February, 1897, 2s. 3d.; August, 1898, 1s. 6d.; August, 1898, 1s. 4d.; many undated, 1s. 3d.; and in 1898 supplying, in some instances, at 1s.

We concur with them on the matter of "having the whip so vigorously applied," for, veritably, the admonition so unmistakably intended for us has only served to bring a "hornet's-nest" about their own heads. The obligation for daylight on this subject is ours, and we thank you and those who have expressed themselves to us direct and through your columns, whom we would inform that we purpose retaining our prices, our quality, and our style, and not to sell pilules and tinctures at a loss, in order to advertise proprietary articles.

Yours obediently,

WATSON & WATES.

SIR,—We have refrained hitherto from entering into the controversy about the prices of homœopathic medicines, but as our silence may be misconstrued we think it only right to say that if the trade would support those firms who are qualified chemists, and not simply medicine-manufacturers, the results to themselves and their customers would be much more satisfactory. We have no wish to follow the lead of certain cutting-houses, and sell goods below cost-price to one man and charge his opposite neighbour 150 per cent. more, but intend to rely on the quality of the articles we supply and the reputation for fair dealing which we have earned. We are pleased to say that some of our customers have already congratulated us upon the stand we have taken, and are sure that others will do so.

Yours faithfully,

56 Duke Street, W., July 12.

LEATH & ROSS.

The Edinburgh Suggestions.

SIR,—I really know very little about the Edinburgh suggestions beyond what has been published, but I understand they were supported by a considerable number of chemists, amongst whom, I doubt not, Mr. Glass occupied a prominent position. I gathered that the suggestions were based upon a desire to bring stores under the sway of the Pharmaceutical Society by some form of registration, and it would appear from Mr. Glass's letter that I was not mistaken. It is stated that chemists would be much benefited by this registration of stores, but a bare assertion of this kind is hardly sufficient. How much would chemists be benefited? By what process of reasoning have the chemists of Edinburgh reached a conclusion which has not been arrived at by any other body of chemists in Britain or in the whole wide world? Have the chemists of Edinburgh no better reason to bring forward than that this is the course which would meet with least opposition from unqualified men? Any suggestions emanating from a body of chemists so numerous and important as the backers of these suggestions are would merit attention in the world of pharmacy; but it appears to me the Edinburgh suggestions merit particular attention, because they have been forwarded to either the Lord Chancellor or the Privy Council. I speak under correction. Without venturing to suggest anything in the nature of censure, I think it is to be regretted if the

Edinburgh chemists have forwarded to any Government department suggestions which I am sure will not meet with approval in any other part of the country. This is a case in which it is not advisable, in the interests of the whole body of chemists, that any district should speak for itself alone. In place of approaching any Government department, it would be much better if each district would forward its suggestions to the Law Committee of the Pharmaceutical Society and allow the whole to be arranged and presented through the proper mouthpiece of pharmacy—i.e., the Pharmaceutical Society. There is nothing to be gained by any departure, upon the part of any body of chemists, from the usual and correct course of procedure. It will be quite understood, I am sure, that in indicating this line of policy I am not in any way toadying to the Pharmaceutical Society.

So long as progress is made in the direction of pharmaceutical emancipation, I care not through what channel the blessing flows—so it be an honourable one—but there is, in my opinion, no hope of progress outside constituted authority. I consider that the Pharmaceutical Society acted wisely in discouraging isolated action.

Dumfries, July 10.

JAMES REID.

[The "Edinburgh suggestions" are twofold, as far as we know. There are the proposals formulated by the Edinburgh District Chemists' Association (see *C. & D.*, June 17, page 952), and a draft Bill of thirteen clauses which has been circulating privately for some months back. This Bill proposes that companies, societies, corporations or business firms, and trustees, executors or administrators carrying on the business of selling or keeping open shop for retailing, dispensing, or compounding of poisons or medical prescriptions, shall (1) employ a qualified manager whose name is published, (2) be registered by the Pharmaceutical Society, (3) on payment of a 5l. 5s. fee and an annual fee of 17. 1s., and (4) intimate change of managership. The Pharmaceutical Society on its part to appoint a registrar, keep a register of drug-companies, and receive the fees. The draft also deals with branch shops and medical prescriptions, regulates dispensing in hospitals and the like, and permits the title "Pharmacist" to be used by Minor men. Mr. Glass appears to have been writing in knowledge of both sets of Edinburgh suggestions; but Mr. Reid, and doubtless most of our subscribers, know only the suggestions printed on June 17.—*Ed. C. & D.*]

The Society and Unqualified Dispensers.

SIR,—If ever the Pharmaceutical Society had an opportunity of improving its position in the opinion of its members and of gaining the confidence of the Government in a manner entirely consonant with its dignity it is surely now that the search-light is being thrown on the unqualified dispenser. There have been in recent years ever-recurring problems bearing on the bread-and-butter side of pharmacy, with which the Council, both by sympathy and temperament, has shown itself quite unfitted to deal. These have culminated in the companies' question, which is apparently a big and unmendable rent in the net which ought to have secured business and profit for the educated and diligent pharmacist. I believe there are many chemists like myself who are prepared to stand up to see that justice shall be done to the trade in those matters, but who have so much experience of the variety and persistence of competition as to be rather sceptical of anything of an absolutely rosy complexion being realised by any of the panaceas at present under the notice of the trade. Besides, whenever we appeal to members of Parliament for sympathy or assistance in such matters we are invariably reminded that they have no interest in enhanced prices of medicines, or in the prevention of free trade in drugs (*vide C. & D.*, June 3, 1899, page 891). On the question of the better regulation of dispensing, however, we come before the country on the stronger and quite irresistible plea of the protection of the public. We have special means of knowing how carelessly and inefficiently much of it is done occasionally, and in some degree, perhaps, within our own ranks, but much more so under cover of medical practice. Altogether this is a matter in which the Pharmaceutical Council is entitled to have the confidence of the Government now that the time for action has arrived. It has been said, and with some measure of truth, that the Pharmaceutical Society really holds its charter under a contemptible Sale of Poisons Act, as if all its members had been educated for the miserable and exclusive business of dealing in a

few scheduled poisons. And the estimate of the trade entertained by the majority (from the Lord Chancellor downwards) does not appear to reach a much higher average. Therefore, when an opportunity arises as at present to assert the dignity and special competency of the chemist and druggist as a dispenser—to quite seriously plead the better protection of the public—and incidentally to enlist the attention and secure the confidence of the Government, we find the Pharmaceutical Society unwilling to lead and unprepared to follow. I hold that it amounts to an absolute dereliction of duty to neglect this opportunity. I have always maintained an open mind as to what the public convenience might require with regard to the sale of some poisons and in the matter of dispensing; but it must be obvious to every member of the trade that the supineness of our representatives with regard to the better regulation of dispensing is a matter on which it is specially qualified to advise. The Council's inaction calls for the strongest expression of dissatisfaction. Next to the administrative work, which absorbs so much of the Council's attention, I can conceive of nothing which would so certainly secure for the members the approbation of members of the trade and the confidence of those outside it. Mr. Glyn-Jones is to be congratulated on having had such a suitable subject to introduce him to the active work of the Council, as well as complimented on the strong position he took up and maintained last week.

Faithfully yours,

Dundee, July 11.

C. CUMMINGS.

SIR,—In spite of the gallant stand made by Mr. Glyn-Jones at the recent Council meeting, we seem to be no further forward as regards the status of the dispenser. The idea of waiting until the report of the General Medical Council is published before offering a suggestion does not appear to be the best course. Having interviewed several medical men on this important subject, I find the idea of the profession is that dispensing should be attended to by the Pharmaceutical Society. If the Council feel it is not their duty, then I ask what is there for the budding members of the craft to do? Would you advise them when they have gained a little experience to form a syndicate and open a drug-store, or start as a dispensing-grocer, or, better still, enlist in the Army Hospital Corps, and so qualify as a dispenser for hospital or Poor-law institution? It seems to me that the ordinary pharmaceutical qualification is becoming practically useless.

Faithfully yours,

Bond Street, W., July 11.

DISPENSER. (60/21)

Pigmy Arrow-poison.

SIR,—In your issue of July 8, page 58, you remark that "Captain Guy Burrows mentions that Dr. Parke erroneously stated that the Beñge arrow-poison is that used by the pigmies."

Having had the pleasure of personal conversation with both gentlemen on the subject, and having the specimens described by both in the museum of the Pharmaceutical Society, I may, perhaps, be permitted to make a few remarks upon the subject of your note.

The two authors are, I think, writing about different things. If Dr. Parke's narrative is carefully read, it will be seen (Parke, "Experiences in Equatorial Africa," pp. 300–319) that the pigmy servant of Dr. Parke gathered the materials for the arrow-poison and prepared it herself, and stated that it was used as an arrow-poison. Although the pigmies live with a larger race at times, it is hardly likely that they would know the constituents of the poison and how to prepare it, and yet not use it for poisoning arrows. Doubtless all their arrows are not poisoned, and it is possible that the tribes of pigmies whom Captain Burrows met with may not have used such arrows whilst under his observation, although it appears from his narrative that the people of Mabodé, in whose land he met with them (Burrows's "The Land of the Pigmies," page 174), certainly used poisoned arrows (*ibid.*, page 121). Dr. Parke's statement is perfectly clear as to the fact that the stem of the *Strychnos Icoja* was used in concocting the arrow-poison, and there could be no mistake about the tetanic symptoms of strychnine-poisoning produced both in Lieutenant Stairs's dog and

in the patients under Dr. Parke's care who had been shot by poisoned arrows.

The term "Beñge arrow-poison" is not used by Captain Burrows. He says in his book (page 184) that the "Beñge poison is erroneously described by Dr. Parke . . . as the arrow-poison of the pigmies." But a reference to page 75 of the same work shows that Beñge means *ordeal*-poison—not arrow-poison at all—and that the plant, *Strychnos Icoja*, the green stem of which is used by the pigmies as one of the ingredients of the arrow-poison, is used by the Azandé as an ordeal, but that the part of the plant the latter use for this purpose is the red bark of the root, not the stem. I quote below the passage which will make this clear:—

Another interesting custom of this tribe is their method of forecasting events, known as the invocation of Beñge. Their faith in this peculiar system of augury is implicit, and shows a belief in some supreme being. They consult it on every occasion of doubt. "Beñge cannot lie; I will consult Beñge," they say. Their mode of consulting this oracle is as follows:—The chief perhaps desires to know if a certain road is safe for him to travel on the morrow. Accordingly he selects two young fowls, and as "Beñge" can only be invoked in quietude, he repairs with two assistants into the bush, where a small clearing is made. Here they sit down; the assistants, opposite to one another, hold the fowls by the legs and draw down the pinion-feathers into the hand, so that the bird is unable to struggle. By means of a feather an equal quantity of the poison—a red composition made by mixing water with the scraped bark of a certain root (*Strychnos Icoja*)—is put into each chicken's throat. Then the man who is invoking the oracle makes an incantation somewhat to the following effect: "Beñge, tell me, tell me true! If this one die and this one live the road is safe." Then he talks to the fowls. "You die and you live," he says. If the result is contrary to his desire he postpones his project or takes another path. The Azandé have no other creed or religion, but in Beñge they have absolute and unshaken faith.

This is not the only poison which is used both as an ordeal and as an arrow poison, for sassy-bark, which is used as an ordeal-poison throughout Central Africa, was also an ingredient in the arrow-poison prepared by Dr. Parke's pigmy servant. The fact appears to be, therefore, that the stem of *Strychnos Icoja* is used as an arrow-poison by the pigmies, and the root-bark as an ordeal-poison by the Azandé.

Pharmaceutical Museum, July 11.

E. M. HOLMES.

The Chemists' Assistants' Association.

SIR,—A statement appears in Mr. Sage's letter in your issue of last week which is misleading, and lest a wrong impression should be created I wish to state:—

1 That the series of Cinderella dances held by this Association have so far been a financial success.

2. That no Cinderella Committee has ever asked for any financial help for carrying on these dances.

3. That favourable dates have already been arranged with the Portman Rooms for the series next session, when the steadily increasing balance of this Association may be again augmented.

The committee would be pleased to welcome Mr. Sage on any of these gay occasions, for he would doubtless be surprised to see how chemists' assistants nowadays can enjoy themselves, and he might even wonder how they do it at their own expense. But salaries are increasing.

Yours truly,

H. H. ROBINS,

Hon. Sec. Cinderella Committee.

113 Ridley Road, Forest Gate, E., July 11.

[Mr. Robins has overlooked the item in the accounts—"Deficit on Cinderellas, 2l. 14s. 4d." He has, however, the right spirit of the thing in him, and we hope he will more than wipe out this deficit next season.—ED. C. & D.]

Assistants in the Orient.

SIR—By this post I send you papers containing reports of an action in which I am concerned. [The breach of agreement case, *Watson v. Cooper*, reported in our last volume, pages 771 and 911, which could not have reached our correspondent at the date of writing. It is unnecessary to repeat the details.—ED. C. & D.] I am anxious that any brother chemist shall be forewarned regarding possibilities which may arise on Eastern engagements, for assistants thinking of coming East should observe (1) when they make an agreement (which may debar them

from taking up an assistantship or starting in pretty well the whole of the Eastern hemisphere) that they are binding themselves for practically a lifetime, as four or five years out East make a man quite unfit for an assistantship at home. An agreement such as the one I signed is held to embrace (in effect) every trade possible in the East, from a merchant who may be a tea or piece-goods dealer to a storekeeper, or even clerk, for almost without exception they are all either agents, or sell one or the other of the articles mentioned in agreement—wines and spirits especially. (2) A chemist's assistant is about the hardest-worked man in the East, and the salary paid him, say \$90 to \$100 (about 9% to 10%) a month, is absurd in the extreme, and it is impossible to live respectably and save money on such a salary. It is a well-known fact that a comparatively uneducated man can command half as much again as a tidewater in the Customs service, and that is the lowest post but one in the outdoor Customs service.

The opening-up to trade of the Philippines, where money is likely to be made freely when the Americans take full charge, gives a good example of the effects of signing such an agreement as I did, for if a firm of chemists have a branch in one part of the Philippines, the assistant would be debarred from opening in any part of the islands. Any assistant intending coming to China should look well into his agreement, and ascertain how it may affect him when it expires. I would say that any salary less than \$200 monthly, with a monthly rise of \$10 for every year after the first, should not be accepted, and the amount of salary to be paid after the first agreement has expired should be stated in the agreement. After a man has been out East four years or so, he feels little inclined to settle at home, and he must accept what salary is then offered to him. Granted a fair field, chemists stand a good chance of making a good living here if they are not tied down, especially in regard to the sale of wines, spirits, cigars, and medicines, to Chinese. I have lately returned from a 200 miles walking-tour in the interior, and there is no doubt a business can be done, as it is now done on a small scale, if sufficient energy is put into it. The moral is, therefore, accept an agreement only where there is a *quid pro quo*, and where the conditions are reasonably limited, say, to ports where the employers have branches at the time of signing the agreement.

Yours faithfully,

Amoy, May 30.

EDWIN QUIBELL COOPER.

[Agreements cut both ways, and firms abroad have always to reckon upon every new assistant being a probable opponent in the future—hence excessive caution. It is unwise to sign any agreement which is to tie the signatory for a portion of his life without carefully considering it, and taking the advice of a solicitor upon it.—Ed. C. & D.]

Conference Tickets.

SIR,—It is much to be regretted that the pleasure portion of the arrangements at Plymouth for the Pharmaceutical Conference have been conducted in such an unsatisfactory manner as regards payment for tickets. A rule has been made that no tickets may be purchased after a certain date, which is perhaps necessary to allow time to complete arrangements; but what is worse is that no single tickets can be obtained. There are many gentlemen who would be delighted to attend a smoking-concert or one river-trip who cannot possibly spare the time to attend the functions allowed to purchasers of the minimum 10s. 6d. book. Then, again, how many gentlemen wish to "treat" their sisters or friends to an evening trip, but are politely informed that they must buy tickets with privileges extending for days (and costing 10s. 6d.) for each individual who wishes to spend one pleasant hour. This is especially hard upon assistants and "small" proprietors. I hope there is yet time to remedy this great mistake.

Yours, &c.

Plymouth, July 11.

VOX POPULI, (61/22)

Dispensing Notes.

What Causes the Explosion?

SIR,—The following prescription has been dispensed by us at intervals for years, and forwarded by post. On the last two occasions the bottle arrived broken. Every possible care was taken in packing, and from the appearance

of the package the purchaser believes the bottle has burst. This view is confirmed by the fact that on one previous occasion, after safe arrival, the bottle was placed on a table, and after a short time exploded. We should be obliged if you would explain if any reaction takes place, and the conditions inducing the same:—

Liq. sodæ arseniatis	...	...	m 160
Liq. potassæ	...	...	m 192
Spt. chloroform.	...	...	m 256
Aq. dest. ad	...	...	3iv.

M.

Yours truly,

INQUIRER. (59/39.)

[A chemical reaction is unlikely in this case. Occasionally mixtures containing chloroform explode on account of the pressure induced by heat being greater than the bottle will bear, which is probable in this case.]

A Hungarian Replies.

Mr. Bela Vasvari, pharmacist, Budapest, replying to "C. T. S.'s" queries in our issue of June 17, page 973, comments upon the following prescription:—

Syr. ferri iodid.	...	...	3vj.
Aq. ad...	...	...	3vj.

M. Ft. mist.

Syrup. ferri iodidi made from liquor ferri iodidi is, in Mr. Vasvari's opinion, very unstable, and if tap-water is used in dispensing the prescription ferrous hydroxide is precipitated—at least, Mr. Vasvari obtained this precipitate when using a syrup containing 12 per cent. of ferrous iodide.

Sodii bicarb.	...	...	3ij.
Tr. nucis vom.	...	...	3ij.
Spt. amm. arom.	...	...	3iv.
Liq. arsenicalis	...	...	m40
Aq. ad	...	...	3vj.

M. Ft. mist.

In regard to the second prescription, which is above noted, Mr. Vasvari remarks that the presence of a large amount of extractive and fatty matter in the 1898 tincture is the principal reason why the precipitate is formed in this case, and not when 1885 tincture of nux vomica is employed. Mr. Vasvari throws out a curious suggestion—that the hydrogen of the sodium bicarbonate assists in retaining in solution the constituents of the tincture when the latter is diluted with water.

A Copaiba-mixture.

SIR,—Could you suggest the best way to prepare the following mixture to give it a pleasant taste?—

Balsam. copaib.	...	...	3j.
Spt. æth. nit.	...	...	3j.
Tr. benz. co.	...	...	3j.

M.

Sig.: 3j. dose

G. A. (60/6)

[Add 1 oz. of spirit of chloroform to the above, and direct the dose to be taken in half a wineglassful of milk. Copaiba treated any way is still copaiba, especially after it is swallowed.]

Legal Queries.

We do not give legal opinions by post. Information regarding most legal matters in connection with pharmacy will be found in THE CHEMISTS' AND DRUGGISTS' DIARY, and in "Pharmacy and Poison Laws of the United Kingdom," and Alpe's "Handy-book of Medicine-stamp Duty."

58/20. Carbide.—You will find all that you want to know about calcium carbide in our DIARY, page 218. Five pounds of the carbide in 1-lb. sealed boxes may be kept by anyone. If more is to be kept, the sanction of the local authority administering the Petroleum Acts must be obtained.

57/35. R. O. V.—The supply of abortive medicines to married women who have missed a period or two may be a criminal proceeding, and we advise you to leave such trade severely alone. "Respectable married ladies" generally

consult their medical advisers in such cases. No matter to what cause the obstruction is due, only special, and in some cases powerful, remedies are suitable, and to give these without exact knowledge of the local conditions (which a chemist cannot possibly obtain) may be the first step towards legal difficulties and the ruin of respectable businesses.

13/55. *Quinia*.—To advertise your pills as "as good as Beecham's and far cheaper" is not, in our opinion, a reputable style of advertising, though we know of no case which justifies us in saying it is illegal. But if you were threatened with an action for an injunction you would probably not fight the case, so that it comes to the same thing. The handbill stating that the pills are good for every complaint for which Beecham's are recommended would, we think, render them liable to medicine-stamp duty.

58/64. *Duplex*.—(1) You must adhere to the proportions of the ingredients for Gregory's powder as laid down in the Pharmacopoeia, if you want to avoid trouble with the Sale of Food and Drugs Act inspectors. (2) Simple Teething-powder.—See *C. & D.*, July 8, page 67.

59/28. *Income-tax* says he has been paying income-tax on 200*l.* for over five years. He always claimed exemption, but did not get it, although he lost about 150*l.* a year on an average, and had at last to give up the business and pay his creditors a composition. He now wants to know if it is possible to recover the amount paid. [He can appeal against the gross amount of the assessment made upon his business profits for the financial year which ended on April 5, 1899, but not for any previous year, and notice of appeal must be given without delay. He might recover a considerable sum under the abatement clauses of the Acts for each of the past three years without any appeal, but he would require an agent for that, such as the Income-tax Adjustment Agency, 12 Poultry, E.C.]

57/49. *Fritz* sold a customer a simple hair-pomade which she used, and afterwards had an attack of erysipelas. She declares that the pomade caused it, and threatens damages. Within what time must she take proceedings?—*i.e.*, after what period may Fritz's mind be at rest from her threatening? [Our correspondent cannot sleep comfortably until the expiration of six years from the date of the alleged injury, as that is the time within which the lady can bring her action. If she has recovered, and delays proceeding for a considerable time, it will be a matter for comment by the defendant's representative at the trial, and will require a good deal of explanation by the lady if she is going to recover any substantial damages. We should advise our correspondent to make inquiries about the lady's habits prior to the alleged injury, so as to be prepared in case of attack. He had better keep a sample of the hair-preparation which is the source of complaint, and have another sample analysed and rub the remainder into the scalp of a few people likely to make good witnesses with the same view.]

Miscellaneous Inquiries.

We reply to subscribers and their employés only upon subjects of interest to other readers generally. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query full particulars regarding the origin and use of the sample must be given, and it must be distinctly labelled. Queries are not replied to by post, and those sent anonymously are disregarded.

30/31. *Hop-bitters*.—As you do not say how you make your hop-bitters extract, we are in the dark as to the cause of your failure to obtain a clear liquid.

42/61. *Season*.—Your sample is practically the same as one we examined and reported on in the *C. & D.*, June 3, 1899, page 900.

40/49. *Lupulus*.—Spons publish several standard Works on Brewing, such as Moritz and Morris's "Science of Brewing" (21*s.*), Southby's "Brewing" (21*s.*), and Steel's "Brewing"

(30*s.*). Perry's "Method of Brewing English Dry Lager-beer" (12*s.* 6*d.*) is the only book we know dealing especially with lager-beer.

52/67. *L. & Co.*.—Book on Wines.—Thudichum's "Treatise on Wines" (Macmillan). Books on Manures.—Morfit's "Treatise on Pure Fertilisers," 84*s.* (Trübner); Griffith's "Manures," 7*s.* 6*d.* (Whittaker); Dyer's "Fertilisers," 1*s.* (Crosby Lockwood).

54/40. *Query*.—On page 239 of "Pharmaceutical Formulas" you will find a recipe for artificial essence of currant, by which black currant is meant; and on page 291 there is a formula for essence of red currant.

54/41. *Velox*.—Your customer who is so troubled with a greasy skin and blackheads is very likely slovenly in his habits. You will find some pertinent remarks on this subject in "Pharmaceutical Formulas," page 35. Get the man to change his habits as far as possible. He should take exercise every evening and a tepid bath immediately after returning to the house, well rubbing down with a coarse towel or flesh-brush. If the bowels are torpid 1 dr. of Epsom salts with 5 gr. of sulphate of iron in 1 oz. of peppermint-water, taken twice a day on an empty stomach, will be of assistance. But the case is not one for medical treatment so much as hygienic reform.

56/45. *Oxide*.—Oil of tartar is deliquesced carbonate of potassium.

58/60. *Gemini*.—The information you ask for as to the Lord Chancellor's investments in drug companies was given in the *C. & D.*, April 8, page 570.

53/53. *Ignorance*.—Camwood substitute, a formula for which was given in the *C. & D.*, April 2, 1898, page 548, is used for colouring saveloy-skins.

55/13. *Cohosh*.—Black cohosh is *Cimicifuga racemosa* (*Actæa racemosa*, Linn.). A formula for the tincture is given in the B.P.

47/26. *Leech*.—The water in which leeches are kept should not be changed too often—once in six weeks is sufficient unless the water is discoloured by blood. In changing the water avoid having the clean and old water at different temperatures, and do not touch the leeches with the hands. A few iron nails in the water have been found advantageous, as well as a few plants of valisneria. The bottom of the leech-jar should be covered with a mixture of sand and small stones.

Information Wanted.

The Editor will be obliged for replies to the following from any who can furnish the information.

24/99. Makers of "Virgin" brand Castile soap?

247/48. What is "Paradise juice," for making home-brewed porter?

55/42. Who is the maker of "Walter White" microscopical preparations?

62/32. Who keeps sash-tools packed in flat brown boxes of one dozen brushes? Boxes marked "1764."

Coming Events.

Thursday, July 20.

Newcastle-on-Tyne and District Chemists' Association. Annual excursion to Morpeth. Train leaves Newcastle 1.30 p.m., arriving at Morpeth 2.20 p.m. The party will visit Morpeth Castle, Morpeth Parish Church, Newminster Abbey, and Mitford. Single tickets, 4*s.* each; double, 7*s.* 6*d.*

Monday, October 2.

The Owens College Department of Medicine. An introductory address at the opening of the Winter Session (October 2) will be delivered in the Physiological Theatre by Sir J. Crichton Browne, LL.D., M.D., F.R.S.

London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from January 1 to June 30, 1899, and to the stocks on June 30. Their accuracy cannot be guaranteed.

	June		Stocks		1899	
	Landed	Delivd.	1899	1898	Imprtd.	Delivd.
Aloes cs &c.	359	127	2,554	2,805	803	1,012
" goulds	—	—	1,025	2,199	2,269	2,984
Anise, star cs	—	—	77	56	258	186
Balsam csks &c.	27	156	868	393	1,145	652
Calumba-root bgs	263	2:9	480	579	748	804
Camphor pkgs	2,157	607	5,877	9,843	5,483	4,514
Cardamoms cs &c.	257	332	2,280	1,584	3,124	2,103
Cinchona pkgs	1,197	805	16,841	20,810	9,001	12,151
Cubeba bgs	—	—	1,863	1,954	127	107
Dragon's-blood cs	23	7	62	19	112	97
Galls pkgs	1,760	465	4,899	6,581	5,318	3,400
Gums—						
Arabic "	1,052	1,803	10,808	10,871	8,400	10,524
Ammoniacum "	26	15	99	26	26	35
Animi & copal "	3,171	2,986	15,501	20,941	21,775	20,561
Asafetida "	132	103	667	491	976	599
Benzoin "	349	244	1,379	3,130	820	1,585
Damar "	971	465	4,010	4,076	3,519	2,641
Galbanum "	—	—	18	—	—	12
Gamboge "	91	6	32	2,3	107	147
Guaiacum "	1	6	32	67	38	64
Kauri tons	304	258	1,382	554	2,574	1,810
Kino pkgs	—	12	91	25	82	51
Mastic "	—	10	17	25	10	23
Myrrh "	10	16	343	413	91	183
Olibanum "	563	701	3,013	4,028	3,526	3,856
Sandarac "	124	130	736	1,054	680	685
Tragacanth "	1,236	976	1,970	3,082	5,334	4,899
Ipecacuanha, Rio bis	82	24	100	151	222	280
" other kinds pkgs	17	18	20	67	171	176
Jalap bls	—	3	228	309	35	110
Nux vomica pkgs	2	219	206	117	1,123	953
Oils—						
*Anise cs	—	5	207	112	60	130
*Cassia "	—	—	70	83	—	—
Castor pkgs	263	262	554	633	1,334	1,123
Cocoa-nut tons	193	94	281	232	648	568
Olive csks &c.	195	329	839	1,179	1,07	1,2,5
Palm tons	—	3	11	20	23	19
†Quinine sulph. lbs	17,819	5,727	169,775	100,234	88,220	23,694
Rhubarb chts	25	92	1,654	466	374	737
Sarsaparilla bales	127	78	423	2:6	614	5:7
Senna bls &c.	19	130	322	570	846	1,740
Shellac, all kinds cs	3,293	3,386	47,753	57,497	22,992	24,267
Turmeric tons	74	21	334	261	277	188
Wax, bees' pkgs	900	705	1,335	1,193	2,317	2,667
" Japan, &c.	—	11	450	497	435	356

* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

NOTE.—The stock of gamboge is now large, being 100 packages more than that of the corresponding period last year, and the heaviest for the past five years; the deliveries for June have been poor, compared with the amount imported. The low prices lately ruling for kino appear to have prevented shipments, which were nil last month; the deliveries have been fairly good, but the stock is excessive, being treble that of former years. The senna stock is still decreasing—322 as compared with 392 last month. Of this amount at least 170 packages are Alexandrian, leaving but 150 of Timnevelly and Mecca sorts. The landings of quinine sulphate during June were 285,104 oz., and the deliveries 91,632 oz., making the stock on June 30 2,716,400 oz., as against 1,604,544 oz. in 1898. In face of these figures, and the heavy bark shipments from Java, a decline is inevitable. The stock of cinchona-bark in London has been inappreciably reduced, but the deliveries show a decrease of 1,611 packages; the stock, however, is small compared with previous years. The trade in rhubarb shows no improvement, deliveries showing a decrease, 92 against 120 in June; the stock is 77 chests less, being now 1,264, against 466 in June of last year. The deliveries of dragon's-blood have fallen away by 26 cases—7 against 33—and the stock, which we understand consists chiefly of poor and medium quality, has risen from 40 to 62 cases. Cardamoms during the month have shown a fair amount of business, and in face of the good supply (2,280 cases) it is surprising how prices are sustained. The stock of Rio ipecac, shows an increase of 58 bales—100 as against 42—due to the heavy arrival three weeks ago, while that of the Cartagena root has been reduced by a bale.

Trade Report.

The prices quoted below are the bottom prices obtained for bulk quantities by importers and manufacturers, who do not supply retailers. They are in many cases exclusive of various charges.

42 Cannon Street, London, E.C.: July 13.

BUSINESS in the Mincing Lane drug and chemical markets is still inactive, and no improvement is looked for for a month or six weeks. The drysaltary-auctions on Tuesday showed little life, the principal feature being a decline in shellac, while the indigo-auctions were depressing. In drugs, the only event of the week has been a sharp advance in santonin, as we predicted last week. We understand that some buyers purchased immediately before the rise. All tartar materials are in improved demand, so is citric acid, which looks like advancing further. Quinine is flat, while ipecacuanha has seen a little business at the easier rates of last week. The advance in morphine has led to a good business for forward delivery, and as regards opium it is reported that, after all, prices of new crop may not be so low as expected, owing to the "corner" in Smyrna. Other changes are tabulated as below:—

Higher	Firmer	Easier	Lower
Canary-seed	Acid, carbolic	Oil, castor	Indigo
Coriander-seed	Citric acid	Oil cloves	Pimento
Morphine	Cream of tartar		Shellac
Oil, pepper-mint	Oil, anise, star		
Santonin	Oil, orange		
Senega-root	Oil, turpentine		
Tin crystals			
Vermilion			

The following are among the arrivals of drugs, etc., from July 6 to 12 inclusive:—

Aniseed oil, 2; (Chinese), 30; arrowroot (St. V.), 150; benzoin, 136; camphor (Jap.), 136; camphor oil, 10; cassia lignea, 1,097; cantharides, 2; cardamoms, 112; cascarrilla (Hamburg), 18; castor oil (E.I.), 342; (Ital.), 80; (Belg.), 70; (Fr.), 236; chillies (Jap.), 100; cinchona, 493; citronella oil (Ceylon), 124; (Singapore), 50; cocaine, 6; coca-leaves, 92; cod-liver oil, 50; colocynth, 8; dragon's-blood, 2; fenugreek seed, 658; galangal (in transit), 134; galls, 20; (Persian), 1,397; gamboge, 40; gentian, 75; gum copal, 144; gum kauri, 243; gum tragacanth (Prsn.), 232; honey (Chil.), 840; (Canad.), 10; insect-flowers, 10; insect-powder, 94; ipecacuanha (Cart.), 8; lemon-juice, 80; lime-juice (W.I.), 15; liquorice-root, 50; musk, 1; nux vomica, 472; opium, 7; (Surinam), 5; orris (Ital.), 8; patchouli oil, 10; peppermint oil, 21; (Jap.), 17; quicksilver, 5,681; rhatany, 42; rhubarb, 15; saffron, 3; sandalwood, 303; sarsaparilla, 50; ditto (Colon), 53; soy, 204; spermaceti, 79; squills, 11; tamarinds (E.I.), 253; (W.I.), 42; turmeric, 412; wood oil, 15; vanilla, 21; (Tahiti), 13; wax, bees', 319; wax, Japanese, 10.

Trouble in the Tea-trade.

The London wholesale tea-trade is much excited at present on account of the tea-draft, the facts of which are briefly as follows:—From time immemorial there has been a draft of 1 lb. allowed on all packages over 28 lbs gross. The importers say that this draft came to no less than 2,720,000 lbs. last year on the entire import, that it is a heavy and unnecessary tax, and they cannot afford to continue it, many growing companies, they say, paying no dividend at all. The dealers, on the other hand, say that it is not a favour, but a right, that the very stringent conditions of sale of the London tea-market are all in the importers' favour, and that the draft is a necessary allowance to cover endless losses and irregularities for which, under the present conditions of sale, they cannot, nine times out of ten, claim on the importers; and the dealers further contend that if one condition of sale

is revised, all must be considered and altered. They point, too, to dividends of 10 to 15 per cent. paid by many big plantation-companies—seem sceptical as to the inability of these companies to continue to afford a 1-lb. draft on which they have apparently prospered so well hitherto. At a meeting of the tea-buyers on Monday last a request was presented from the importers for four representatives of the buyers to meet four of the importers to discuss matters, and this was regarded as a sign of grace on the part of the importers, but the Conference so held on Tuesday proved abortive, and on Wednesday a meeting of the buyers unanimously resolved to buy no tea next week without the draft, and to stand firm. The resolution of the importers to abolish the draft comes into effect on Monday, July 17, but, in spite of the importers' assertion that they have control of something like 95 per cent. of the import for abolition of draft, there are some 23,000 packages of Ceylon and Indian tea, first or second hand, catalogued with the draft for the 17th (the fatal date), and for Tuesday, so the dealers will not be starved, and the importers' position is materially weakened. The financial screw will soon affect many of the importers, for the exports from India and Ceylon during June were exceptionally heavy, and with 25 millions of pounds or so of tea on the water and arriving on a closed market it is obvious that many importers will have to do something with the tea to turn it into money, and as they can only do this by allowing the draft, the odds appear at this moment to be in favour of the dealers.

The Half-year's Trade.

The Board of Trade returns for June again reflect the improved vitality of British trade which has been noted since the beginning of the year. The exports for the half-year (subtracting new ships, 5,213,667 $\frac{1}{2}$.) show an increase of 8,800,000 $\frac{1}{2}$, or 7.8 per cent., the figures for the six months ending June 30, 1898, being 112,503,179 $\frac{1}{2}$, and for the same period of this year 126,521,894 $\frac{1}{2}$ (less the ships above noted). The import trade is almost stationary in value, the increase being 741,125 $\frac{1}{2}$, or 0.3 per cent., as the totals were 235,995,751 $\frac{1}{2}$ in the first half of 1898, and 236,736,876 $\frac{1}{2}$ now. This is mainly due to articles of food and drink being 3,000,000 $\frac{1}{2}$ less in value, owing to the fall in prices of certain cereals. Raw materials for textile-manufacturers show the heavy decline of 3,283,440 $\frac{1}{2}$, but metals increased by 2,795,000 $\frac{1}{2}$, owing to rises in prices; while oils went up by 612,587 $\frac{1}{2}$, and chemicals, dye-stuffs, &c., by 70,990 $\frac{1}{2}$. The trade in ginger and pepper is not improving. This year there has been a heavy decline in the importations of both articles (22,602 lbs. and 5,124,249 lbs. respectively). Cinnamon increased by 186,060 lbs., but we understand that the quality has deteriorated. Unenumerated spices have risen by 1,484,207 lbs. As to oils, there has been a falling-off in the importation of turpentine to the extent of 42,413 cwt. (26,276 $\frac{1}{2}$), due to the decreased output in the United States; coconut and palm oils, however, show up well, the figures recording an increase of 59,798 cwt. and 37,122 cwt. respectively, but in olive oil there is a shrinkage of 4,812 tons during the six months. Petroleum continues to grow in bulk, the increase this year being 13,236,467 gals. Chemical manufactures and products unenumerated improved by 33,335 $\frac{1}{2}$, the figures being 754,919 $\frac{1}{2}$, as against 721,584 $\frac{1}{2}$ in 1898. Cinchona-bark continues to fall, the decline representing 17,086 cwt., or 35,343 $\frac{1}{2}$, while gum arabic has risen from 29,280 cwt. (56,482 $\frac{1}{2}$) to 32,624 cwt. (88,975 $\frac{1}{2}$), no doubt on account of the fact that gum tragacanth (included in this heading) is finding increased demand. The imports of unenumerated drugs are increasing, the figures for the first halves of the last three years being 435,401 $\frac{1}{2}$ in 1897, 443,986 $\frac{1}{2}$ in 1898, and 542,324 $\frac{1}{2}$ in 1899. There is nothing fresh in regard to alkali exports, which have been 1,802,957 $\frac{1}{2}$, against 1,884,827 $\frac{1}{2}$ in 1898. The exports of medicines, including drugs and medicinal preparations, still show improvement, the figures for the half-years being 553,437 $\frac{1}{2}$ in 1897, 531,566 $\frac{1}{2}$ in 1898, and 579,319 $\frac{1}{2}$ in 1899. Finally, the soap-trade grows apace, our exports this year being 465,808 $\frac{1}{2}$ against 410,034 $\frac{1}{2}$ in 1898.

Japanese Government Camphor-bureau.

Our Yokohama correspondent, writing on June 15, states that the site of the Camphor-bureau in Formosa has already

been fixed, and the official regulations for controlling it are about to be made public. It is said that the Government will not sell immediately what it buys, preferring to realise a higher price later. It is most likely that the high figure of 100 yen per picul (the present quotation is 65 to 70 yen) will be officially fixed. It is also reported that the Government will limit the number of camphor-stills to about 3,000, that being only one-third of the present number, thereby hoping to improve the quality.

The Supply of Strophanthus.

Mr. E. M. Holmes, Curator of the Pharmaceutical Society, who knows more about the botanical origin of strophanthus than most people, has communicated a note to the *Journal* of the Society on the difficulty of obtaining the Kombe seeds. As a result of inquiry, he has identified specimens of three distinct species—*S. Eminii*, *S. Kombe*, and *S. Courmontii*—and has shown those from which the genuine seeds are derived to Mr. F. M. Moir, of the African Lakes Corporation (Limited), 45 Renfrew Street, Glasgow, who has gone into the matter, and now says:—

"We have written fully to our friends in Africa on the subject, and are asking them to ship only the genuine quality, and under the mark 'Mandala Brand.' All packages of this genuine strophanthus will be marked A.L.C.L. 'Mandala Brand,' London, and the seed will be sent in pods."

In Mining Lane circles this suggestion to import the seeds in pods is objected to, although it happens to embody the form in which strophanthus was originally imported. The basis of the objection is that the bulk of the pods will much increase the cost of the drug, because the freight will be six or seven times more, and the freight is the greater part of the cost. There is no doubt, moreover, that American and continental buyers insist upon getting the strophanthus-seeds, and to try to sell them the strophanthus-pods is much like insisting upon giving a man who wants a golf-cap a bale of cloth from which to make the cap.

The 1899 Rose-crop.

(By a Special Correspondent in Bulgaria.)

The distillation of this year's rose-crop, which ended about June 20, lasted a little over three weeks. On account of the excessive heat and drought which prevailed throughout the whole country during May the rose-harvest was nearly a fortnight earlier, and threatened at the outset to be a very poor one. It is true the prospects at first were most encouraging, and the yield of rose-buds rich and abundant; but on account of the heat many of the newly-formed buds withered and dropped as soon as they appeared. Furthermore, the absence of moisture in the air soon dried up the flowers gathered in the morning, and consequently they yielded less otto than usual. During the first eight days of the rose-distillation it required fully 280 lbs. of rose-flowers to make 1 T. oz. of otto. Fortunately, with the first fall of rain, at the end of May, the climatic conditions in the rose-district suddenly changed for the better, and delightfully cool and fresh weather set in, lasting throughout the greater part of June. This most timely and favourable change extended the rose-distillation over a period of about twenty-four days, averted all dangers of a rose-famine, or at least of a very poor crop; and at the end the present crop turned out as good as last year's both in quality and quantity. Some justly assert that it is at least 5 per cent. better. The new prices will not be fixed for a few weeks yet. The last three weeks have been chiefly devoted to the examination, verification, and estimation of this year's yield. The reports in circulation are different, and, as usual, very conflicting. As a matter of course, all parties having old stock of deteriorated grade, and also exporters who make a speciality of selling rectified geranium mixed up with a little otto for extra fine or virgin otto of rose, try by every imaginable ruse to minimise the crop to incredible smallness, and represent it to the consuming-world abroad as a total failure. These parties boldly affirm that the present crop is even 40 (forty) per cent. smaller. Their assertions, clearly enough, are not based on facts—they are only Oriental ways of making perfumers buy in haste, and without much regard to quality. Of course, in thus ridiculously minimising the crop, they pretend to appear before the producers as their well-wishers, aiming to raise the price of the otto. The present crop, in spite of reports to the contrary, is fully 70,000 T. oz. This does not include any old stock left over from last year, nor does it comprise any of the rose-rectified geraniums and other adulterants, which some exporters are in the habit of using, whenever the crop is under the average. The cost of pure otto this year ranges from 18s. to 22s. per T. oz.

Heavy Chemicals.

[These prices are for market-centres other than London]

The general condition of the heavy-chemical market remains for the most part as lately reported, a good all round and steady business is being transacted, and values remain mostly unchanged but firm. Demand for export is particularly good, the Tyne and Clyde markets being well employed with orders. Bleaching-powder and soda crystals are in heavy demand, benzols firm and improving, and chlorate of potash rather scarce.

COLOURS.—A moderate demand is being experienced, and prices are steady. Mineral black: Ordinary, 3s. to 3s. 3d.; and best qualities, 4s. to 4s. 6d. Pure ivory black, 12s. 6d. to 13s. 6d. per cwt. Lampblack, 5s. to 7s. 6d., according to quality. Ultramarine, pure, 40s. to 45s. Umber: Devonshire, 42s. 6d. to 60s.; Turkish, 45s. Ochre: French JC, 62s. 6d. to 65s.; French JF, 6l. 5s. to 6l. 10s. Oxide of iron: Finest, 20l.; medium, 10l. to 10l. 5s.; and common, 7l. Pure chrome, 50s. per cwt.; yellows, 9s. to 16s. per cwt. Zinc oxide, 23l. to 25l.

SULPHATE OF AMMONIA is weak, with quotations a shade under those last given. Exports from Leith last week amounted to 69½ tons.

ZINC SALTS very steady. Sulphate crystal, 7l. 15s. to 7l. 17s. 6d. per ton. Chloride solution, 7l. 10s. per ton.

TIN CRYSTALS are higher at 8d. per lb., and very firm thereat.

BROWN ACETATE OF LIME.—Steady, at 5l. to 5l. 5s., c.i.f.

NITRATE OF SODA.—Ordinary, 7s. 10½d.; refined, 8s. 1½d.

BORAX.—Crystals, 16s.; and powdered, 16s. 6d. Boracic acid, 25s. and 27s.

LEAD SALTS.—Steady. Sugar of lead, white, 23l. 10s. per ton, and brown sugar of lead 19l. 10s. per ton, less 2½ per cent. Glasgow. Nitrate of lead 20l. 10s., less 2½ per cent. Glasgow.

SOUTH DURHAM SALT is in good inquiry, and price is firm at 9s. 6d. per ton, f.o.b. Tees.

SALTPETRE.—British refined, barrels, 20s. 6d.; kegs, 21s. 6d. German barrels and kegs, 18s. 9d. and 19s. 6d. respectively.

MAGNESIUM SALTS.—Sulphate (Epsom salts) somewhat scarce and firm, at 60s. to 65s. per ton, on rails in bags. Chloride, 50s. per ton; carbonate, 37s. 6d. to 40s. per cwt.; and calcined magnesia, 1s. to 1s. 4d. per lb.

GREEN COPPERAS is in heavier demand for export, and best Lancashire is firm at 42s. to 43s., f.o.b. Liverpool.

Liverpool Drug-market.

Liverpool, July 12

CASTOR OIL.—The market has remained steady during the week, and sales of good seconds Calcutta are reported at 2½d. Holders are very firm in views to the effect that very little is offering forward. First-pressure French firm at 2½d. to 2½½d., according to position. Second-pressure French is held at 2½½d. per lb.

CANARY-SEED.—During the past three days sales amounting to 1,200 bags have been effected at 35s. to 35s. 6d. per quarter, and now holders are firm at 36s. per quarter, which price, however, has not yet been paid.

QUILLIAIA is very firmly held indeed, and large lines have changed hands up to 12l. 17s. 6d. per ton, and the nominal quotation is 13l.

GINGER, JAMAICA.—The recent arrival has been cleared off the market at prices ranging from 52s. 6d. to 60s. per cwt.

RHATANY-ROOT.—Ten bales fair quality were offered at auction, and 2d. was bid, but the lot was withdrawn for higher prices.

CREAM OF TARTAR.—Very firmly held at 78s. to 85s., according to quality. The tendency is strongly upward.

HONEY.—Chilian and Californian are in a very firm position, though the former is slightly affected by recent arrivals. Fifty barrels pile 3 sold at 19s. 6d. per cwt., and 79 barrels various low piles at 19s. ex quay. Californian is increasingly firmer.

IRISH MOSS is selling freely at 6l. to 7l. per ton, ex quay.

BEEWAX maintains its strong position, and ½ ton Gambier is reported sold at 6l. 15s. per cwt.

SULPHATE OF COPPER.—Firm at 24l. 12s. 6d. to 24l. 15s. per ton.

American Market.

New York, July 3

Business has been quiet during the week, owing to the "Fourth."

ACETANILIDE.—In accordance with a recent decision of the U.S. Court of Appeal it has been generally stated that this preparation is now exempt from duty. This statement, for which the trade journals are responsible, has been made under a misapprehension of the facts. The case which has just been decided was originally brought under the Act of 1894, and under that Act acetanilide has just been declared duty free. Unfortunately, however, for importers the Act of 1897 is now in

existence, and under this Act acetanilide is clearly dutiable as heretofore.

CINCHONIDINE is still moving upwards, and 35c. is now the general quotation, though small parcels are to be had at 32c. to 33c. per oz.

ORPIM is stronger in sympathy with foreign advices, and dealers now refuse to accept less than \$3.10. The demand is small.

COLOCYNTH is higher, consequent on cables from London. Spot quotations are now 40c. to 42c. for ordinary, and as high as 50c. for selected Trieste fruits.

COD-LIVER OIL is easier, and for fine Norwegian holders have shaded prices, and will accept \$19.50 to \$21.50 for choice brands.

CASCARA SAGRADA.—New crop promises to be abundant, but prices are still unsettled. Buyers are not willing to pay at present the equivalent of 4c. to 4½c. New York.

PEPPERMINT OIL is slightly higher, dealers quoting 80c. to 95c. for Western, and \$1.10 for Wayne country.

ALOES, CURACOA, are fractionally higher; sales have been made ex dock at 2½c., and dealers now ask a fraction over 3c. per lb.

German Market.

Hamburg, July 11.

Business is very quiet at present, with only a few transactions in drugs.

ANISE (RUSSIAN).—Quiet, at 31m. per 100 kilos.

CITRIC ACID is very firm; second-hand holders now ask 325m per 100 kilos.

CAMPHOR shows very little business; second-hand sellers quote 330m. per 100 kilos, for refined.

CUMIN-SEED is very quiet; new Maltese is offered at 50m. per 100 kilos.

ERGOT OF RYE is steady, at 240m. to 250m. per 100 kilos, for good sound.

IPECACUANHA.—Cartagena is firm and dearer, at 26m. per kilo.

QUININE is dull and neglected, with second-hand sellers at 41m. per kilo.

TURPENTINE has suddenly advanced again. American, spot, is 61m. per 100 kilos.; September-December, 60m. per 100 kilos. paid; there has been a strong demand to-day.

SANTONIN has advanced 3m. per kilo., from 9m. to 12m., and we shall probably see much higher prices.

WAX (JAPANESE) is quiet and easier, at 55m. per 100 kilos.

PEPPERMINT OIL is dearer; HGH has been advanced to 5.10m. per lb.

JAPANESE is also firm, at 7½m. per kilo.

RUSSIAN ANISE OIL is quoted 13m. per kilo., and Star-anise oil 13½m. per kilo.

Japanese Markets.

Yokohama, June 15.

This market is very dull so far as drugs and chemicals are concerned. In regard to imported articles, quinine is exceptionally slow of sale and easier; holders now quote 60 sen to 65 sen per oz. for 1,000-oz. lots. Iodide of potassium, foreign, is 2.95 yen (6s. 1d.), and Japanese 3.10 yen. Tartaric acid sells rather well on account of consuming season. Alkali, 58 per cent., Brunner's make, is being sold at 4.30 yen per picul, and American make at 4.10 yen per picul. Soda bicarbonate has changed hands at 4.15 yen per cwt., which is about 3d. cheaper than cost, owing to competition among importers. Bismuth subnitrate unchanged. Insect-powder is very slow of sale, and holders want to dispose of their stock, even at half-cost; in fact, they are now selling at 60 sen to 65 sen per lb., in 56-lb. tins, which cost them about 1.00 yen when imported. This is due to production in Japan at very low prices, which will in course of time have an appreciable effect on foreign imports. The cost of Japanese insect-powder is only 30 sen (7d.) per lb., and the quality is equal to that of the European at 1s. 5d. Saffron has advanced, on account of advices from abroad; present quotation is 32 yen to 33 yen per catty, Ph. Jap. II. quality. This article is also being produced in Japan, though on a very small scale. Boracic acid has advanced by nearly 10 per cent., now 18 yen per cwt. Cocaine muriate is firmly held at 6.25 yen per oz. for 100-oz. lots, with higher tendency. Alcohol is still imported on a large scale by every steamer, in anticipation of high tariff to be enforced on August 18. Present stock is estimated at about 300,000 gals. Demand for tannic acid has greatly declined of late, on account of local manufacture.

In export staples we have to report transactions of about 500 piculs of dry ginger, mostly for Bombay, at 8.10 yen to 8.15 yen per picul (1898 crop), and 8.40 yen to 8.50 yen per picul is quoted for 1897 crop. Business in peppermint is very slow at unchanged rate. Crude iodine is quoted at 3.20 yen per lb. (6s. 7d.). About 500 lbs. of potassium iodide has been exported this week.

Cablegrams.

HAMBURG, July 13, 12.23 P.M.: Business in refined camphor is still quiet, 320m. per 100 kilos. being the price. Quinine is slightly easier. Wormseed is scarce, and 44m. per 100 kilos. is wanted. Oil of turpentine is firmer, and is now selling at 62m. per 100 kilos.

NEW YORK, July 13, 3.8 P.M.:—Fair business is being done here, the principal movements being as follows:—Opium has advanced to \$3.15 per lb., and is very firm, while senega-root is dearer at 26c. per lb. HGH peppermint oil has also a hardening tendency, the quotation having advanced to \$1.15, and scarce at that. "Wayne County" is quoted 95c., and Western 80c. per lb. Among the articles that have declined are cascara sagrada, for which 6c. per lb. is now asked. Camphor has fallen to 44c., and balsam of tolu is neglected, 29c. per lb. being the nominal quotation.

AMSTERDAM, July 13, 4.20 P.M.:—At the auctions held here to-day the moderate supply of 6,811 packages (5,456 in June) was offered for sale, of which 6,493 packages found buyers, at an average unit of 7.60c. per half-kilo., as compared with 8.25c. in June. The following were the approximate quantities purchased by the principal buyers:—American and English factories, who purchased the quinine-equivalent of 6,427 kilos.; Brunswick, 5,908 kilos.; the Mannheim and Amsterdam factories, 6,435 kilos.; the Frankfort-on-Maine and Stuttgart factories, 6,550 kilos.; and various buyers, 2,899 kilos. The prices paid for the manufacturing-bark ranged from 9c. to 85c. per half-kilo., and for druggists' from 12c. to 78c. per half-kilo. The tone of the market was firm at the decline.

London Markets.

ACID, CARBOLIC.—Steady and in good demand at the following quotations:—Crystals, 39° to 40° C., 6½d. to 6¾d.; and 35° to 36° C., 6¾d. per lb.; detached crystals, 39° to 40° C., 8d. to 8½d. per lb.; crude, 60° F., 2s.; ditto, 75° F., 2s. 6d. per gallon; cresylic, 95 to 98 per cent, 1s. 1d. to 1s. 1½d. per gallon. The acid is said to be very scarce.

ACID, CITRIC.—Some makers are unwilling to make a quotation, while others ask 1s. 7½d. per lb., but are not anxious to do business. A fair amount has been put through this week, mostly in second-hands, and a further advance is expected.

ACID, TARTARIC.—A good business has been put through this week, and quotations are very firm, but unchanged, at 1s. 1d. for English crystals, and 1s. 0½d. for foreign.

The Barcelona exports in 1898 were 49 tons (28,665%), and 64 tons (37,453%) in 1897.

ALOES.—An arrival of 20 boxes black capey Curaçao has come to hand; fine livery Curaçao is now seldom seen.

ARROWROOT.—Quiet, and all bought in on Wednesday at 4½d. to 4¾d. per lb.

ARSENIC.—Steady, at 20s. per cwt. for best white powder.

ASAFFETIDA.—One or two small lots have been sold this week, but prices show no quotable change.

BENZONIN.—Since the auctions there have been sales of good Sumatra seconds, well packed, at 9½. 10s. to 9½. 15s. per cwt., the latter figure representing gum that was bought in nominally at 10½. 10s. in auction. About 10 cases of common thirds, badly packed, and few almonds, have also sold at 5½. 10s. per cwt. There have been some good arrivals this week and 230 cases are now landing, of which about 100 are Palembang in tins and blocks, and the remainder Sumatra.

BUCHU.—A few bales of fair green round ex auctions have been sold at 5d., and yellowish ditto at 3½d. per lb.

CINCHONA.—Up to the present five brokers have declared cinchona-bark for sale next Tuesday. The total amounts to 974 packages.

The exports from Ceylon for the week ending June 20 were 1,463 lbs., and from January 1 to June 20 they were:—

	1899	1898	1897	1896
Lbs. ...	411,373	395,716	346,216	570,361

The "Vriesseveen" cinchona-bark department at Amsterdam has received a telegram from Java announcing the bark-shipsments from June 6 to July 10, 1899, at 1,130,000 lbs.; and from January 1 to July 10 4,978,403 Amst. lbs.

COCAINE.—Quiet, but firm, at 11s. 3d. for B. & S. brand; and 12s. 3d. per oz. for Merck, from makers. Three cases of crude cocaine were sold on this market last week at a rather low figure, which is kept secret.

COLOCYNTH.—Eight cases have come to hand this week. America has been a buyer on this market for some time past, and last week 1s. 2d. per lb. was paid on their account; there are still orders waiting fulfilment at this figure.

CREAM OF TARTAR.—Firm, and in good demand. Ordinary first white crystals are quoted 75s., and powder 76s. 6d.; 95-per-cent. powder, 78s. per cwt. The Bordeaux quotation for ordinary is 76s., f.o.b.

DRAGON'S-BLOOD.—Six cases of gum in reed have arrived; the article is scarce, and the quality in this instance is good. Poor and medium qualities are extremely dull.

GALLS.—All kinds are quiet and unchanged. A few bags of blue Smyrna have been sold at 57s. 6d. per cwt.; green and white are not offered.

GAMBOGE.—A few cases of Siam pipe, first pile, have sold in second hands this week at 8½. 15s. per cwt.

GUM ARABIC.—Large supplies were put forward of all sorts, mostly East Indian varieties, but little business was done. A few lots of fair Oomra sold at 25s. per cwt.; darker sorts, 16s. Bombay scented good reddish, 44s.; duller ditto, 38s. 6d.; dark sorts, 22s. Good bold Aden, 45s.; pale siftings fine, 22s. to 23s. One case fair Soudan sorts realised 30s. Australian good bold reddish, 34s. per cwt.; part blocky, 20s. 6d.; blocky and dusky, 16s.; low blocky, 10s. Ghatti, good pale, 23s. per cwt.; common sorts, 14s. 6d. Persian, white Mogador, brown Barbary, and Ghezirah were all bought in. Good pale picked Trieste gum has sold in a small way at 6½. 10s. per cwt. Further small sales of Persian insoluble sorts have been made privately at 19s. per cwt.

GUM TRAGACANTH.—Market continues very firm, with a moderate business in Persian, of which qualities between 9½. 10s. and 12½. are almost exhausted. Smyrna seconds have been in better demand, and a few cases of inferior have sold at 9½. per cwt. Bussorah hog-gum is very quiet, and imports this season have been very few.

INDIGO.—The auctions opened on Monday and concluded on Tuesday. The demand was poor, but holders were firm, and only a small part sold—Bengal at 2d. to 3d. decline, Oude 2d., Kurpah and Bimlipatam par to 2d. decline. Madras easy; 5,400 chests were offered, and 1,150 chests sold at and after the sales. Messrs. W. J. & H. Thompson sum up the position as follows:—

After three months, during which the market remained perfectly stagnant, we have again to report a flat sale and lower prices. The quantity declared was unusually small, but even that proved to be more than sufficient. After nearly three years of continually declining prices the trade has become more or less demoralised, and refuse to hold stock as in former years. The consequence is that purchases are restricted to the barest requirements, and importers are of necessity compelled to hold for the trade and supply a hand-to-mouth demand as it arises. Meanwhile, any attempt to sell what is not specially required meets with only low bids, which increases the depression. The same disorganisation exists on the Continent, and hence there is no export demand and nothing to encourage speculative buying to steady the market. Even the very decidedly less favourable crop reports that have lately been received from Calcutta have quite failed to have any influence on buyers.

IPEACACUANHA.—There has been a small business since the auctions, both in first and second hands, and for one or two bale lots of Cartagena 11s. 6d. per lb. has been paid, and from 14s. 9d. to 15s. for Rio. Some importers of Cartagena hold out for 12s. 6d., but cannot do business at that figure. Eight bales Cartagena have arrived this week, but no Rio.

JALAP.—There has been an improved inquiry in New York, resulting in sales of over 3,000 lbs., at 11c. per lb., and a firmer feeling has developed, with quotations at 11c. to 11½c. according to quality. The London market is quiet and without business.

MORPHINE.—Makers have advanced their quotation to 4s. 9d. per oz. for powder in 1,000-oz. lots, and this figure has been paid for a large contract for October delivery (15,000 cz.), and to-day the same figure has been paid for December delivery.

OIL, ANISE (STAR).—In greater demand this week, and the market is reported firmer in consequence. On the spot 5s. 9d. per lb. has been paid. To-day the market has been more excited, and there are no sellers under 5s. 10½d. to 6s. per lb. spot, with buyers at 5s. 9d. For forward delivery 5s. 8d., c.i.f., has been paid, but to-day cables have been received asking 5s. 9¾d., c.i.f.

OIL, CLOVES is slightly easier, though no alteration has been made in the nominal quotation; 2s. 5d. per lb. will buy English in 12 Winchester lots.

OIL, COD-LIVER.—A dead letter so far as this market is concerned.

BERGEN, July 8.—A depressed market, and in spite of the fact that the exports to date have been larger than any previous year—viz., 6,569 barrels, against 4,312 barrels. Best Lofoten non-congealing oil can hardly be quoted above 54s. per barrel, f.o.b.

Confirming our report of last week the following remarks from Brodr. Aarsæther's report, for which we are indebted to Messrs. Freudentheil & Co., may be quoted:—The market is now quiet at 55s. to 60s., c.i.f., according to place of destination. As to price during the autumn, this will, of course, greatly depend on the consumption. Holders would lose money by lowering their price now, and will be only too glad to grasp any opportunity to raise their prices in order to make a profit on their stocks, and we consider a decline improbable; on the other hand, this year's large quantity of oil, which must be sufficient for the requirements, will prevent any material advance.

OIL, LEMON.—Firmer. The agents for Siles' brand report brisk inquiry at 3s. 8d. per lb., subject.

OIL, ORANGE.—On the spot there have been sales at 8s. 6d. per lb. and to-day 8s. 7d., c.i.f., is quoted from Messina.

OIL, PEPPERMINT.—American HGH is dearer again this week, one holder having advanced his quotation to 5s. 6d. per lb. spot, in accordance with cable-instructions; there are, however, other sellers at less money—viz., 5s. 3d. There is no improvement to note with regard to the English crop, owing to the want of rain. Meanwhile the market is quiet, at 26s. per lb.

OIL, TURPENTINE.—Firmer for forward delivery, but spot is unchanged at 1s. per cwt.

OLIBANUM.—Large supplies were offered in auction to-day at slightly lower rates, the total reaching 756 packages. Fair pale drop sold at 35s. 6d. to 36s. 6d. per cwt. Fair dark mixed sorts, 20s. 6d.; common low drop, 19s.; garblings, 15s. 6d. to 16s. 6d. Eighty-six packages were sold.

OPIMUM.—The market for Persian remains very firm, and 11s. 6d. to 11s. 9d. per lb. has been paid this week for fine, while for arrival 11s. 6d. is quoted. Smyrna druggists' has been in good demand, and on the spot 9s. 6d. has been freely paid.

SMYRNA, June 30.—The principal rôle this week has again been played by the large export holder, who at the opening of the market bought 22 cases Karahissar tale quale at the equivalent of 8s. 3d.; and since this transaction further business has been done at a higher range of figures—viz., 9 cases Karahissar tale quale at 8s. 6d. and 5 at 8s. 4d. per lb. The market closed firm, with buyers at 8s. 8d., but no sellers. The arrivals of old crop in Smyrna amount to 1,560 cases, against 3,708, and of the new 319, as against 56. The stock of opium in Smyrna on June 30 was calculated at about 1,500 cases, and in Constantinople 205 cases. The sales during June amounted to about 60 cases. Farmers in the interior still continue to demand high prices for new, which some dealers who have depleted stocks are bound to pay. Until the new opium accumulates, and is available for shipment, which will not be for another month or six weeks, there will not be any decline. In fact, it is likely to advance further still if the consuming-markets respond to present values, as most of the old drug is in the hands of a few interested holders.

QUICKSILVER.—Steady at the advance of last week. Makers of mercurials do not intend to raise prices on this occasion, and will book orders at the old figures quoted on May 6.

QUININE.—At the close of last week the spot quotation in second hands was 1s. 3¼d., and August delivery at 1s. 3¾d., with a small business in the latter position. On Monday the market opened quiet, but fairly firm, small sales being reported at 1s. 3¾d. for October, and unchanged

figures for August. Since then there has been no business to speak of, and quotations remain unchanged in all positions. On Wednesday 1s. 3¼d. was paid on the spot for a small lot, and there were buyers at 1s. 3¼d., but no sellers under 1s. 3½d. Some manufacturers report a fair consumptive demand at their quotation of 1s. 6d. per cwt.

SANTONIN.—In consequence of the almost total failure of the wormseed crop in Turkestan, makers on July 8 announced a sharp advance in prices—viz., to 5s. 5d. per lb. for 25 to 100 kilo. lots, with corresponding prices for less wholesale quantities. The above quotation is f.o.b. Hamburg, in original cases of 50 kilos., packing not included. It is reported here that the Russian Government has levied an export-duty on wormseed. A good business has been done this week at the advance, but in some cases orders have been booked subject to approval only, as it is expected we shall see still higher prices. The present advance is about 1s. 2d. to 1s. 3d. per lb. on 100-kilo. lots.

SARSAPARILLA.—Quiet. The parcels left over from last auctions are still obtainable, and no business has been done this week. About 40 bales Lima-Jamaica have arrived this week, but they are small in size, and equal to about 20 ordinary-sized bales. Twenty-five bales of grey Jamaica root have also arrived.

SCAMMONIUM.—Small sales of firsts have been made at 30s. per lb., but the demand is very restricted.

SENEGAL.—Dearer. Business has been done this week at 1s. 2½d. per lb., c.i.f., but holders now require 1s. 4d.

SENA.—Some of the Alexandrian sold in auction last week at 7¾d. per lb., subject to approval, has not resulted in business, as importers require more money. There are a good many inquiries for Tinnevely, but the assortment offered is poor, so that the new crop is looked forward to. Good Tinnevely pods are scarce and inquired for.

SHELLAC.—The market last week closed quick and easier, 100 cases T.N. changing hands at 66s. per cwt. for August delivery. At auction, on Tuesday, 350 cases offered, of which about 230 sold at 1s. per cwt. decline for second orange, fair T.N. being now quoted at 65s. The following were some of the prices paid:—

SECOND ORANGE:—Dull pale flat, 65s. to 66s., fair flat reddish free, 64s. to 65s., good bright red strong, 65s., cakey ditto, 64s. to 65s. per cwt. Fine lemony Octagon B., without reserve, 85s. to 86s. per cwt. Garnet and Button were all bought in.

SPICES.—Business has been slack this week, and there are only slight variations in prices to note. On Wednesday at the public sales Cochin *Ginger* was dull, and only a few lots sold—bold and medium part cut at 48s. 6d. per cwt., good washed rough at 23s., and small Calicut at 17s. 6d. to 18s. Jamaica mostly sold at about previous rates—common at 48s. to 50s., good bold at 66s. 6d. per cwt. Zanzibar *Cloves* lower, with sales of October-December delivery at 3½d. to 3¾d. per lb. *Pimento* lower; ordinary to fair partly sold at 3¼d. to 3½d. per lb. *Chillies* quiet; fair Zanzibar were bought in at 38s. per cwt., and good Nyassaland at 45s. *Cassia vera* was bought in at 30s. per cwt. *Cassia lignea* withdrawn at 50s. per cwt. for old import; only one lot of new selected sold at 40s. per cwt. *Pepper* dull. Singapore black is worth 5¼d. per lb. on the spot, and 5¾d. to 5½d. to arrive, according to position, with very little doing. Singapore white was bought in at 8½d. per lb. for fair; August-October steamer is quoted 8½d., and Penang 8¾d. for same shipment.

SULPHONAL.—Second-hand parcels are now reported to have been cleared off the market, and there is now very little to be had under the lowest contract prices, 15s. to 15s. 6d. per lb., at which figure Bayer's brand is quoted for both crystals and powder in second-hand. Makers' prices are unchanged at 16s. 6d. for 10-lb. lots.

VERMILION.—English manufacturers have advanced their quotations by 1d. per lb., and now quote 300-lb. lots and upwards, 2s. 3d.; 150 lbs. and over, 2s. 4d., and for less wholesale quantities, 2s. 5d. per lb.

WAX, BEES.—Since the auctions there have been a few sales, including wormy and mixed Madagascar at 5l. 15s. per cwt. No business has transpired in Jamaican.

Barcelona exported 77 tons (4,626l.) in 1898 and 80 tons (3,982l.) in 1897.